pedizione in abbonamento 46 | 46 | AG | SG72m | Dostale legge 662/96 | SG72m

MEMORIE DELLA SOCIETÀ AUG 1 2 2004 LIRRARIES ENTOMOLOGICA ITALIANA

Volume 81

2002

Supplemento al Bollettino della Società Entomologica Italiana, 134 (2) (30.9.2002)



SOCIETÀ ENTOMOLOGICA ITALIANA

Sede in Genova, via Brigata Liguria, 9 presso il Museo Civico di Storia Naturale

CONSIGLIO DIRETTIVO 2002-2003

Presidente: Augusto Vigna Taglianti

Vice Presidente: Mario E. Franciscolo

Segretario: Roberto Poggi

Amministratore: Giovanni Dellacasa Direttore delle Pubblicazioni: Claudio Canepari

Consiglieri: Baccio Baccetti, Sebastiano Barbagallo,

Attilio Carapezza, Achille Casale, Fabio Cassola, Mauro Daccordi, Giulio Gardini, Giuseppe Osella,

Carlo Pesarini, Enrico Ratti, Riccardo Sciaky, Stefano Zoia

Revisore dei Conti: Enzo Bernabò, Enrico Gallo, Ducezio Grasso

Revisore dei Conti supplenti: Giuliano Lo Pinto, Sergio Riese

Bibliotecario: Giulio Gardini

Comitato di redazione: Achille Casale, Fabio Cassola,

Mauro Daccordi, Mario E. Franciscolo,

Roberto Poggi, Riccardo Sciaky,

Augusto Vigna Taglianti, Stefano Zoia

Segreteria di redazione: Stefano Zoia

Consulenti Editoriali

NILS MØLLER ANDERSEN (København) - PAOLO A. AUDISIO (Roma) - GEORGE E. BALL (Edmonton) - EMILIO BALLETTO (Torino) - SEBASTIANO BARBAGALLO (Catania) - MARCO A. BOLOGNA (Roma) - BARRY BOLTON (London) - PIETRO BRANDMAYR (Cosenza) - MARIO COLUZZI (Roma) - ROMANO DALLAI (Siena) - THIERRY DEUVE (Paris) - ALESSANDRO FOCARILE (Medeglia) - ERNST HEISS (Innsbruck) - MANFRED JÄCH (Wien) - VOLKER MAHNERT (Gèneve) - LUIGI MASUTTI (Padova) - ALESSANDRO MINELLI (Padova) - CLAS M. NAUMANN (Bonn) - LAZLO PAPP (Budapest) - SANDRO RUFFO (Verona) - VALERIO SBORDONI (Roma) - KONRAD THALER (Innsbruck) - STEFANO TURILAZZI (Firenze) - S. BRADLEIGH VINSON (College Station) - JEFF F. WAAGE (Ascot) - ADRIANO ZANETTI (Verona) - ALBERTO ZILLI (Roma) - PETER ZWICK (Schlitz)

MEMORIE DELLA SOCIETÀ ENTOMOLOGICA ITALIANA

Fondata nel 1869 - Eretta a Ente Morale con R. Decreto 28 Maggio 1936

Volume 81

2002

Pubblicato con il contributo del Ministero per i Beni e le Attività Culturali

REGISTRATO PRESSO IL TRIBUNALE DI GENOVA AL N. 76 (4 LUGLIO 1949)
Prof. Cesare Conci - Direttore Responsabile
Spediaione in abbonamento Postale 50% - Quadrimestrale
Stampato da Ingraf, Via M. S. Genesio 7, 20158 Milano

•

Fabio CASSOLA

Materials for a revision of the African genus *Dromica* (Coleoptera Cicindelidae)*

Abstract - All data and materials are provided which have been accumulated by the author, in the course of over twenty-five years, about the poorly known but highly speciose African tiger beetle genus *Dromica* Dejean, 1826. These preliminary data and their interpretation will hopefully make it possible and easier for future students to develop a more comprehensive taxonomic revision of the whole group. Such a task has proved to be made very difficult by several basic factors, such as the great number (over 200) of described taxa, the difficulty of locating and borrowing so many type specimens from different collections and institutions, the paucity of specimens which are usually available for most species, and, in most instances, the lack of recently collected, sufficiently long series of specimens from definite, recognizable localities. Moreover, the ecology and behaviour of most *Dromica* species, that are flightless, fast-running, hard-to-collect, small predators of savannah, grassland and semidesert habitats, most of which are active for very short periods only, depending on the rains, also obviously explain why specimens are usually so scarce in collections.

The list is given (Appendix I) of all the names which have been attached so far to the genus *Dromica* in the entomological literature, and for each of them the proposed status in systematics, the basic taxonomic changements, the depository of type specimens, the material studied, as well as all known distributional data are provided. Moreover, a provisional arrangement is given of all the recognized species (over 150 in all) in the various natural species groups which are presently recognizable (Appendix II). Two new genera [*Foveodromica* n. gen. (type-species: *Dromica gracilis* W. Horn, 1909), with 16 species in all, and *Pseudodromica* n. gen. (type-species: *Dromica clathrata* Klug, 1834), with 21 species] are described for two distinct groups of species which differ from all others in having slender, instead of inflated, third article of labial palpi, and moreover because of other characters. Consequently, new combinations are proposed for all the involved species.

Seven species are described as new to science: *Dromica stalsi* **n. sp.** (from Roossenekal, Mpumalanga, South Africa), *Dromica schuelei* **n. sp.** (from the environs of Louis Trichardt, Northern Province, South Africa), *Dromica pseudotenella* **n. sp.** (from NE KwaZulu-Natal, South Africa), *Dromica paulae* **n. sp.** (from the Arabuko-Sokoke Forest, in coastal Kenya), *Dromica zambiensis* **n. sp.** (from western Zambia), *Dromica brzoskai* **n. sp.** (from the environs of Tshipise, Northern Province, South Africa), and *Pseudodromica lerouxae* **n. sp.** (also from Roossenekal, Mpumalanga, South Africa). Moreover, eleven taxa are raised to full specific status (*Dromica connexa*, *D. crassereducta*, *D. elongatoplanata*, *D. ertli*, *D. globicollis*, *D. oesterlei*, *D. prolongata*, *D. prolongatesignata*, *D. pseudofurcata*, *D. setosipennis*, and *Pseudodromica neavei*), and, in contrast, *pseudosetosula* is downgraded to a subspecies of *neavei*. The specific status is also revised for six more taxa (*Dromica fossulata*, *D. granulata*, *D. neumanni*, *D. vittata*, *Pseudodromica marshalli*, *P. sculpturata*), and several new synonymies are established.

^{*} Studies of Tiger Beetles. CXXV.

Riassunto – Studi sui Cicindelidi. CXXV. Materiali per una revisione del genere africano Dromica (Coleoptera, Cicindelidae).

Vengono forniti in questo lavoro tutti i dati e i materiali accumulati dall'autore, nel corso di oltre 25 anni di studio, sul difficile genere africano *Dromica* Dejean, 1826, in modo da preparare il terreno, rendendolo più agevole per altri studiosi, ad una vera e propria revisione sistematica dell'intero genere. Questo compito si è dimostrato più arduo del previsto a causa di alcuni fattori di base, quali il gran numero di taxa descritti in letteratura (oltre 200), la difficoltà di reperire e ricevere in prestito così tanti esemplari tipici da collezioni e istituzioni diverse, il basso numero di esemplari disponibili per la maggior parte delle specie, e, in molti casi, la mancanza di serie sufficienti di esemplari di recente cattura e di esattamente indicata provenienza. Di più, l'ecologia e il comportamento della maggior parte delle specie, che sono atteri ma estremamente rapidi piccoli predatori degli ambienti di savana, prateria o semideserto, attivi in genere solo per brevi periodi di tempo, in concomitanza con le piogge, spiegano ulteriormente il perché le *Dromica* siano di solito così scarsamente rappresentate nelle collezioni.

In Appendice I viene fornita la lista completa di tutti i nomi che sono stati finora in qualche modo ricondotti in letteratura al genere *Dromica* s. auct., e per ciascuno di essi vengono indicati la posizione sistematica proposta, la sinonimia di base e i cambiamenti subiti in tassonomia, il luogo di deposito dell'olotipo e/o degli esemplari tipici studiati, l'elenco del materiale studiato, nonché tutti i dati di distribuzione finora conosciuti. In Appendice II, inoltre, viene fornita una provvisoria sistemazione di tutte le specie riconosciute valide nei vari gruppi naturali di specie che sembra attualmente di dover riconoscere esistenti. Due generi nuovi [*Foveodromica* n. gen. (specie-tipo: *Dromica gracilis* W. Horn, 1909), con 16 specie in tutto, e *Pseudodromica* n. gen. (specie-tipo: *Dromica clathrata* Klug, 1834), con 21 specie] vengono descritti per due distinti gruppi di specie che differiscono dalle altre a causa della forma sottile e non dilatata del terzo articolo dei palpi labiali, nonché per ulteriori peculiari caratteri.

Infine, sette specie vengono qui descritte come nuove per la scienza: *Dromica stalsi* **n. sp.** (di Roossenekal, Mpumalanga, Sud Africa), *Dromica schuelei* **n. sp.** (dei dintorni di Louis Trichardt, Northern Province, Sud Africa), *Dromica pseudotenella* **n. sp.** (del KwaZulu/Natal nord-orientale, Sud Africa), *Dromica paulae* **n. sp.** (della Foresta Arabuko-Sokoke, sulla costa del Kenya), *Dromica zambiensis* **n. sp.** (dello Zambia centro-occidentale), *Dromica brzoskai* **n. sp.** (dei dintorni di Tshipise, Mpumalanga, Sud Africa), e *Pseudodromica lerouxae* **n. sp.** (anch'essa di Roossenekal, Mpumalanga, Sud Africa). Altre undici entità sistematiche vengono poi elevate al rango di buona specie (*Dromica connexa*, *D. crassereducta*, *D. elongatoplanata*, *D. ertli*, *D. globicollis*, *D. oesterlei*, *D. prolongata*, *D. prolongata*, *D. prolongatesignata*, *D. pseudofurcata*, *D. setosipennis*, and *Pseudodromica neavei*), mentre, al contrario, la specie *pseudosetosula* viene degradata a sottospecie di *neavei*. Lo status specifico di ulteriori sei entità (*Dromica fossulata*, *D. granulata*, *D. neumanni*, *D. vittata*, *Pseudodromica marshalli*, *P. sculpturata*) viene infine rivisto e ripristinato, e diverse nuove sinonimie vengono pure proposte.

Key words: *Dromica*, systematics, nomenclature, world-wide catalogue, literature, type depositions, materials.

Introduction

The huge biomes of the African grasslands, open woodlands, savannahs and semideserts are represented, just as well as by antilopes or cheetah, by the speciose tiger beetle genus *Dromica* Dejean, 1826 (type species: *Cicindela coarctata* Latreille & Dejean, 1822). This genus, as it is presently understood, includes approximately nearly one

hundred and fifty known species, all of which are wingless, fast running insects, ranging from small to relatively large in body size (7-25 mm), and which are widely distributed over the African continent south of the Saharo-Sahelian region. The northwesternmost recorded specimen is from the "Haute-Sangha" region, probably in the Central African Republic (Horn, in Burgeon 1937), while the northernmost specimens have so far been collected in southern Sudan (1 species), southern Ethiopia (5 species) and southern Somalia (3 species). The species richness of this genus increases as a gradient toward eastern, central and southern Africa. In contrast, no *Dromica* species are so far known either from the West African countries (Senegal to Cameroon) or from heavily forested countries such as Congo, Gabon, Burundi and the larger part of the Democratic Republic of Congo (formerly Zaire). Only one species is so far known from Rwanda.

Because Dromica are basically savannah dwellers, their geographical distribution borders the great central African forests without penetrating them, from the northeastern Dem. Rep. of Congo (northern Uele, Kibali-Ituri, Haut-Zaïre: 3 species) to the Shaba (ex-Katanga) and Angola. Current knowledge indicates increasing species numbers from Uganda to the southernmost regions of Africa: Uganda (3 species), Kenya (10), Tanzania (24), D.R. Congo (30), Zambia (22), Angola (19), Malawi (17), Zimbabwe (29), Mozambique (31), South Africa (68). Quite understandably, fewer species are known from predominantly desertic countries such as Namibia (9) and Botswana (15) despite their huge sizes. The Republic of South Africa has by far the greatest number of Dromica species, almost all in Transvaal (48) and Natal (37), with only a few species occurring in the Free State (11) and Cape (11) Provinces. Lesser numbers are known from Lesotho (4) and Swaziland (7). Thus, if we accept the assumption that high species richness reflects centers of origin, eastern South Africa likely represents the original center of the genus' evolution and dispersal. However, it is noteworthy that two interesting, isolated, dromicoid-looking, possibly related elements, have been recently discovered outside the huge geographical range of the genus Dromica, namely Dromicoida elegantia Werner, 1995, from the primary savannah habitat of Comoé National Park in Ivory Coast (Werner 1995, Fahr 1998), and Socotrana labroturrita Cassola & Wranik, 1998, from the stony and scrubby desert of Socotra Island, off the coast of Somalia in the Indian Ocean (Cassola & Wranik 1998; Cassola & Pohl 2002) (figs 1, 163).

Over 200 names have been proposed so far within the genus *Dromica* or in related generic taxa. On the whole they often give the impression of representing several different natural groups so that the genus will most probably turn out to be polyphyletic. Two generic names, *Myrmecoptera* Germar, 1843 (type species: *M. egregia* Germar, 1843), and *Cosmema* Boheman, 1848 (type species: *C. furcata* Boheman, 1848), have been proposed so far, in addition to *Dromica*, but they have been subsequently synonymized with *Dromica* by Horn (1908c, 1926a). Future research and a better understanding of the whole group may suggest to re-establish W. Horn's subtribe Dromicina (Horn, 1899a), which was included in the subtribe Prothymina by Rivalier (1971: "...le genre *Dromica* ne semblant pas mériter une sous-tribu particulière"), as well as to split the genus *Dromica* into several different generic stems, similarly as Rivalier himself (1950, 1954, 1957, 1961, 1963, 1971) did with the former genus *Cicindela* Linné *sensu auctorum*.

Rivalier (1971) considered that the genus Dromica, together with three other African

6 Cassola

genera: *Prothyma* Hope, 1838 (type species: *Cicindela quadripunctata* Fabricius, 1801, from the Oriental region), *Euryarthron* Guérin, 1849 (type species: *Cicindela bocandei* Guérin, 1845), and *Neochila* Basilewsky, 1953 (type species: *Cicindela kigonserana* W. Horn, 1905), belong to the subtribe Prothymina. As to the genus *Bennigsenium* W. Horn, 1897 (type species: *B. planicorne* W. Horn, 1897), he placed it in subtribe Cicindelina, within the *Chaetotaxis*-group, together with other "genres africano-malgaches archaïques formant passage des Prothymina aux Cicindelina" (Rivalier 1971). However, several morphological features, such as the developed underside pubescence and the peculiar dromicoid shape of the labrum (which shows a deep indentation on both sides of the middle teeth), would seem to indicate that the genus *Bennigsenium* is a closer relative to *Dromica* than is the genus *Euryarthron* (which, despite a strong dromicoid appearance, has a "normal" cicindeline labrum). I myself mistakenly described a *Bennigsenium* species as a new *Dromica* species, *D. basilewskyi* Cassola, 1978 (Cassola 1978a; Werner 1993b).

On the other hand both *Prothyma* and *Neochila*, unlike *Dromica* and *Bennigsenium*, by virtue of their having virtually no underside pubescence and a characteristic prothymine sculpture of the elytra, are typical prothymine genera, similar to other genera of subtribe Prothymina from the Oriental, Australo-Papuan, Neotropical and Malagasy regions (including perhaps *Dromicoida*, whose six-haired labrum otherwise resembles that found in the subtribe Iresina); thus again suggesting that *Dromica* ought to be placed, together with *Bennigsenium*, the two new genera described below, *Socotrana*, and possibly also *Euryarthron*, in a separate subtribe (Dromicina). But such a major taxonomic change cannot be made without first reviewing the status of all the groups that would thereby be affected.

TAXONOMIC REVISION

I began this project over twenty-five years ago and have since published a series of preliminary papers dealing with individual African regions, *Dromica* groups or new species (Cassola 1975, 1978a,b, 1980a,b, 1983a, 1985, 1986a,b, 1989; Cassola *et al.* 2000; Cassola & Miskell 2001; Cassola & Schüle 2002). I also familiarized myself with the ecology and behaviour of several *Dromica* species, in the course of several collecting trips to Africa: to Somalia (April-May 1987, May 1988), Kenya (April 1990, April 1995), and Transvaal (December 1992-January 1993, January 2000). However, soon I had to face several serious obstacles, which still make a full modern revision of this genus a difficult task. These can be summarized as follows:

a) Most species are still known from a single specimen or perhaps a small number of specimens. No fewer than 10 of the species that have been described are known from the holotype alone, 10 species from two specimens only, 12 from a total of six specimens at most. Moreover, nearly 20 additional species are still known only from the type series, as they do not appear to have been collected subsequently. Consequently, this paucity of specimens affects nearly one third of the entire known *Dromica* fauna. The lack of

reasonably long series of syntopic specimens from many different localities and regions makes it difficult or even sometimes impossible to fully appreciate species-specific diagnostic characters and local or individual variations.

- b) The location of type specimens is often unknown or difficult to discover. Only a few museums have so far published detailed lists of all the name-bearing type specimens, including *Dromica*, in their possession (Döbler 1973, Tommasini & Marini 1988, Cochrane 1995). Moreover, identification of type specimens within the 19th century collections is sometimes a difficult task, which can be overcome only by experienced specialist workers for the various groups, as no proper labels were usually pinned at the specimens in those times. In original old descriptions, depository of type specimens was also often not indicated. Fortunately the location of some significant historical collections is usually known (Horn & Kahle 1935-7), but the type specimens being sought are not necessarily to be found in the collection of the author responsible for the original description.
- c) Owing to the scanty material that is available, as well as the fact that most old specimens are poorly or vaguely labeled, distributional maps are often impossible to draw up. Moreover, the names of localities which are found in original descriptions or in labels pinned to old specimens often date back to colonial times and are no longer in use or have been changed into completely different names, so that a major piece of historical research is required for their identification.
- d) Diagnostic features are often difficult to assess, as many of them are found, perhaps by reason of mimicry or convergent evolution, in various *Dromica* groups. Characters such as labral shape and colour, head and pronotal striation, elytral marking patterns, elytral sculpture, and so on, are often similar or even identical in several different species, although they may be found in different arrangements or combinations. Proper separation of species would most often impose direct comparation between specimens, not always an easy task if rare or even single type specimens are to be borrowed on study loan at different times from different sources. Ideally, one should have all the known related species available for close examination at the same time, which is rarely possible. Sometimes, the more specimens one examines, the more difficult it appears to properly separate the most closely related taxa, due to mixed characters and intermediate forms, and consequently while the most extremely diverging specimens seem very easy to tell apart from each other, intermediate specimens would sometimes suggest, in contrast, that the involved taxa cannot be separated at all.
- e) Field collecting of *Dromica* is hardly an easy task. Although diurnal dwellers, specimens become active only with particular weather and temperature conditions, and are otherwise rare, sporadic or even impossible to find. Moreover, unlike other cicindeline tiger beetles, they are not gregarious. Occurrence usually follows the first seasonal local rains, and as a consequence of the extreme dry climates which normally dominate the African grasslands and savannahs, activity periods of most *Dromica* species are usually short and ephemeral, and moreover highly impredictable. One has to be in the "right" place at the "right" time, a combination of coincidences that is often difficult to attain. For

instance, on 2 January 1993 in an open Mopane scrub area in the Kruger National Park some 20 km NW of Shingwedzi I found three species - *D. lepidula* W. Horn, 1903, *D. laticollis* W. Horn, 1903, and *D. quadricostata* W. Horn, 1903 - occurring together commonly immediately after a heavy shower, whereas immediately preceding the rainfall they were not evident (fig. 136). Similarly, my 18 type specimens of *D. somalica* Cassola, 1989, were caught on 10 May 1987 about ten days after the first seasonal rains, in a very small area of about 30 m by 10 m in the environs of Afgoi, Somalia, whereas one year later, on 8 May 1988, the very same spot appeared to be much drier, as the rains had come much earlier in that year, and as a consequence all I could find was a single dead specimen only (Cassola 1989, Cassola & Miskell 1990).

f) Last but not least, most *Dromica* species, thought wingless and flightless, are extremely speedy runners, and may be glimpsed but briefly in the grassy vegetation or amongst the thorny scrubs where they seek refuge. Proper intercepting trapping techniques (pitfall traps hardly work in daytime) should hopefully be developed to ensure that reasonably representative series of specimens from the various localities are made available to students in the future.

What is definitely needed now is a full taxonomic and systematic revision of the entire taxon. This paper, however, presents only a limited scope of my current understanding of all described *Dromica* forms, as well as a tentative list of the various natural groups (may be future full separate genera) which I currently think should be recognized. These results should prove useful to later workers who undertake a more complete revision.

HISTORY

Prior to the creation of the genus *Dromica* Dejean, 1826, only one species was known, namely Cicindela coarctata Latreille & Dejean, 1822, which, however, was still a "nomen nudum". Dejean (1826) never formally described the genus Dromica, just providing a description of coarctata instead, thus the type species of this genus is Dromica coarctata Dejean, 1826. Entomologists of the early and middle 19th Century only knew a handful of present-day valid species (by "valid" I mean in my present understanding of the genus: see Appendix II). Dejean himself described only two species (1831: tuberculata, vittata), and others were subsequently added by Klug (1834: clathrata, trinotata), German (1843: egregia), Boheman (1848: elegantula, furcata, gilvipes, lepida, marginella, sculpturata; 1860: lateralis), Thomson (1856: bertolonii), Bertoloni (1858: consimilis, limbata), Chaudoir (1860: carinulata, sexmaculata; 1864: citreoguttata, octocostata; 1865: albivittis, cordicollis, grutii, saundersii, variolata), Gerstaecker (1867: nobilitata), Bates (1872: mauchii, polyhirmoides; 1878: albicinctella), Wallengren (1881: fossulata), Quedenfeldt (1883: auropunctata), Dohrn (1883: bilunata), Dokhtouroff (1883: alboclavata, granulata), and Kolbe (1897: neumanni, taruensis). All but one of these 36 species still appear to be valid.

The bulk of the species in this genus, however, following the ever more and more rapid progresses in the zoological exploration of the African continent, was discovered and described by the South African entomologist Louis Péringuey (1888: foveolata; 1892: erikssoni; 1893: ambitiosa, cordicollis, costata, grandis, hamata, junodi, limpopoiana, pseudoclathrata, ramigera, spectabilis, tenella; 1894: angusticollis, dolosa, formosa, invicta; 1896: gloriosa, miranda, transitoria; 1898: gunningi, leydenburgiana; 1904: concinna, specialis; 1908: convexicollis, zuluana), and by the leading German tiger beetle specialist Walther Horn, who worked solitarily over almost fifty years, from the end of 19th century up well into the 20th one (1892: quinquecostata, schaumi; 1896: bennigseni, flavovittata, peringueyi; 1897: discoidalis, helleri, kolbei, ritsemae, semilevis, tricostata; 1898: filicornis, tarsalis; 1899: pentheri; 1900: batesi; 1901: marshallana; 1903: apicalis, hildebrandti, lepidula, prolongata, quadricostata, tenellula, traducens; 1904: erlangeri; 1908: marginepunctata, wellmani; 1909: densepunctata, fundoplanata, gracilis, mesothoracica, setosula; 1913: confluentesculpta, cupricollis, gibbicollis, humeralis, neavei, stutzeri; 1914: abruptesculpta, bicostata, bicostulata, foveicollis, globicollis, grossula, strandi; 1922: elongatoplanata, pseudofurcata; 1924: oneili, pilosifrons, pseudocoarctata; 1926: nigroplagiata, proepipleuralis; 1929: intermediopunctata, laterodeclivis, punctatissima, seriepunctata, serietuberculata, spinipennis; 1932: tricostulata; 1935: cristagalli, soror).

Thus, while Fleutiaux's (1892) and Heyne's (1894) catalogues listed 51 species in all (14 under Dromica, 13 under Myrmecoptera and 24 under Cosmema), the number of known Dromica species was raised by Walther Horn, in his subsequent catalogues (Horn 1905, 1910b, 1926a), to 78, 82, and 92, respectively (Rapp, 1946). At the end of Horn's time and until the 1960s, the number of Dromica known species totaled 122, all but three of which are still considered valid. Later, the well-known specialist of African carabid beetles, Pierre Basilewsky, added four more species (1963: allardi; 1965: lunai; 1972: allardiana; 1974: passosi), I myself also described a few more (Cassola, 1978: borana; 1980: angolana, kavanaughi, similis; 1985: juengeri; 1986: confusa, differens, horii, kanzenzensis, oberprieleri; 1989: abukari, somalica; Cassola et al. 2000: mirabilis; Cassola & Miskell 2001: profugorum; Cassola & Schüle 2002: werneri), and seven additional ones are added in this paper. Some more new species have been described recently by Werner (1993: kenyana; 1996: lizleri; 1998: antoniae, moraveci, sigrunae), by Schüle & Werner (1999: endroedyi; 2001: rawlinsi, termitophila), by Wiesner (2001: thomaswiesneri), and by Werner & Schüle (2001: murphyi), thus bringing the total present number of known species up to over 160.

The use of the names *Myrmecoptera* and *Cosmema* was long kept by Péringuey and Horn, as either distinct genera or subgenera, then Horn (1908c, 1926a) synonymized both of them with *Dromica*. However, in subsequent years, Walther Horn sometimes revived *Myrmecoptera* and *Cosmema* as full generic names (Horn 1926b, 1931, 1935a), but in his latest work (published posthumously in 1940) he came back to the comprehensive genus *Dromica*, an interpretation followed by Wiesner (1992) and Werner (2000).

CASSOLA

SYSTEMATICS

The genus Dromica was created by Dejean (1826) for the species Cicindela coarctata Latr. & Dej., 1822. The name was expressely derived from the Greek word δρομικόs, meaning "running". The only clear and important diagnostic character given by Dejean was the inflated structure of the third (or penultimate) joint of the labial palpi, as compared with that of the Neotropical genus Euprosopus ("...le troisième article des labiaux est un peu plus renflé") (fig. 2). However, such a feature is common to most of the species which are presently included in the genus Dromica, and in particular it is found as well in *Dromica furcata*, which is the type species of the genus *Cosmema* Boheman, 1848. In fact, despite Boheman's statement ("Genus Dromicae generi quoad habitum subsimile, sed structura palporum, labro antice in medio producto, tri-dentato, antennis multo tenuioribus, filiformibus differt"), this species does not seem to differ much from D. coarctata, as both species share characters, such as the shape of labial palpi, the labrum advanced in the middle, and the filiform antennae (figs 2, 3). Moreover, in both species, the maxillary palpi, too, have their second joint conspicuously inflated. As a consequence, furcata does not seem to deserve a different generic status and Cosmema is here considered to be synonymous with Dromica.

The third described genus in the group is Myrmecoptera Germar, 1843, whose type species is the puzzling M. egregia (see discussion in Appendix I). Germar (1843) pointed out, as previous authors also did, the inflated shape of the third or penultimate article of labial palpi ("Palpi labiales articulo tertio inflato") and moreover the subfoliate antennal shape ("Antennae apicem versus compressae, dilatatae, subperfoliatae"). However, the further character given by Germar, namely the longitudinally grooved tarsi ("Tarsi supra longitudinaliter striati"), is similarly found in the species coarctata and furcata too, as well as in practically all Dromica species, so it appears to be devoid of any diagnostic importance. As for the foliated antennae (fig. 5), these appear to represent an ambiguous character, which is commonly found in many Dromica species groups, but surprisingly not in all species, as some may have dilated, even foliated antennae, and others, though obviously relatives of the formers, may not present such a morphological character. Moreover, foliated antennae are known to occur in several other non-related tiger beetle or carabid species and genera which inhabit African savannahs, such as (to mention a few) the genera Elliptica, Bennigsenium, Trichotaenia, Cypholoba, Polyhirma, Eccoptoptera, Piezia. This character, therefore, is likely to be convergently related to some unknown ecological requirement and cannot be taken as a good diagnostic character of importance in systematics. Other diagnostic characters such as the pronotal structure, the shape of male aedeagus, the different elytral pattern, and the developed underside pubescence, serve to place Myrmecoptera as a distinctive group of present-day Dromica species.

A remarkable diagnostic character of *Dromica*, compared with other Prothymine genera, is the size of the mesepisterna, which are much larger than metepisterna, probably as a consequence of apterism and the effacement of shoulders. This feature was used by Horn (1899a) for separating *Dromica* into a distinct subtribe (Dromicina). Future morphological and phylogenetic study may again lead to the resurrection of such a subtribe. As for the various natural groups (possibly to become different genera in a major

review to come) which are recognizable within present-day genus *Dromica* itself, diagnostic characters should rather be sought amongst those which are indicated below.

a) Patterns of Elytral Markings. Elytral markings may be completely lacking in some species, but they are usually present in most *Dromica* species. Most often, however, markings are reduced to single small patches or spots only. As a rule, elytral markings of most *Domica* species are very peculiar, within the whole tiger beetle family, in being most often built as a coating of the elytral surface, which covers it in relief, more or less completely filling the elytral costae or foveoles underneath to form a continuous or fragmented cover, as if poured onto the elytra rather than being a part of it. Bertoloni (1858), who first noticed this peculiarity of the elytral markings of *Dromica*, described it as follows: "questa fascia bianca osservata colla lente direste fatta di una vernice di biacca".

When they occur, the markings form a limited set of elytral patterns. They are often arranged in a submarginal band, which can be either continuous from shoulder to apex (marginella-type), split into two sections, a humeral spot and a submarginal band from the middle (or from above the middle: lepida-type) to the sutural angle, or present as three separate roundish spots (humeral, middle and subapical ones) (sexmaculata-type). Ordinarily, but not always, females, unlike males, lack any humeral spot. In some species, the submarginal band may be present on disc with a more or less short, usually descending, inner spur in the middle (furcata-type), in others it may be connected with a discal patch (which in turn can be either roundish or arc-shaped) in the middle of the elytra and usually within the rear half of the elytron (spectabilis-type). There is a further type of elytral pattern which includes a longitudinal basal patch too, running backwards from the base and within the front third of the elytral disc (mauchii-type). When this basal patch is present, neither a humeral spot nor the front half of a submarginal band is usually left, and moreover such a basal patch can be sometimes connected with the discal continuation of the subapical lunule (erikssoni-type). Finally, in at least two species (polyhirmoides and oberprieleri), the markings include, or are merely reduced to, a roundish patch on both sides of the apical part of the suture, so as to form a single roundish apical patch. Such a conspicuous pattern is common to some co-occurring carabid species as well, such as Piezia angusticollis Boheman, 1848, and Cypholoba notata (Perroud, 1846), thus possibly pointing to an interesting batesian-müllerian mimicry complex (Cassola 1986a, Cassola & Vigna Taglianti 1990).

b) Pronotal shape and sculpture. Many *Dromica* species may appear superficially to be very similar in general body shape and elytral pattern. Such a striking similarity suggests poorly known and poorly investigated mimicry association which gives the species in question some unknown advantage in the wild. However, closer examination reveals sometimes striking differences in other body characteristics which make it clear that one is dealing with two or more distinct species. Good diagnostic criteria can often be found in shape and sculpture of pronotum, which may be more or less elongate, the length vs. width ratio usually being a good distinguishing feature. Moreover, shape of middle lobe may differ strikingly, being either rounded and globose with effaced epipleural rims, or parallel-sided with pronounced, raised epipleural rims. The sculpture of the pronotal disc may also

CASSOLA

differ profoundly, being either transversally striated or posteriorly raised in two more or less conspicuous protuberances. Striations too may also differ a good deal, as the striae can be more or less numerous, finer or coarser, straighter or waved, transversal or partially descending. A simple count of the transversal striae which are noticeable on the disc of the middle lobe, between the front and hind transversal grooves, will sometimes provide the key to separating several closely related species, for example within the *bertolonii*-group (*bertolonii*, *fossulata*, *costata*, *quadricostata*).

- c) ELYTRAL SCULPTURE. Elytral sculpture too can sometimes offer good distinguishing features either because of the different density and depth of the elytral punctures or foveoles, or because of the different arrangement of the several elytral elements (foveae, longitudinal costae, uncostate hind part of elytra, elytral markings, etc.). For example, elytral sculpture made possible the separation of the closely allied species of the *marginella*-group (*marginella*, *alboclavata*, *albicinctella*).
- d) Shape of Male Aedeagus. Unlike the cicindeline genera (Cicindela L. s. auct.) and several other prothymine genera (such as Prothyma, Physodeutera, Euryarthron, Odontocheila, Pentacomia, Oxygonia, and others), the inner sac of the male aedeagus of the Dromica species, poorly armed as it is with a few membranous, poorly-sclerotized pieces, does not offer adequate distinguishing characters to taxonomists. A closer study of inner sac features, anyway, should definitely be done, as my own knowledge is based on a few scattered observations only. However, the shape of male copulatory organ as a whole appears to be much more important and it may well help to distinguish several different natural groups within the present-day Dromica species. Aedeagus of most species is tapering, arc-shaped, moderately elongate, apically ending into a more or less evident dorsal hook. In other species, however, it can be very long, narrow, straight, apically hooked (as in prolongata, fig. 102), or it may sometimes present a very long, slightly down-curved, apical beak (as in bennigseni, fig. 87); or, on the contrary, it is of a completely different type, relatively shorter, bulky, much inflated in the middle, with a short straight apical beak (as in clathrata and related species, figs 115-128). The study of such an organ, therefore, may well help to identify the various different natural groups of species.
- e) Shape and colour of labrum. Some labral characters, such as its typical tripartition (with the three middle teeth abruptly separated from the outer ones by a deep indentation on both sides of the front edge of the labrum) and four-haired chaetotaxy, are common to all *Dromica* species and to a few other African genera as well (such as *Bennigsenium* and *Socotrana*), thus probably identifying them as a distinct subtribe (Dromicina). Moreover, the colour of the labrum may also serve as an additional feature for distinguishing some species, as it can be fully testaceous, or black to pitch-black with a yellowish patch or stripe in the middle, in both sexes or only in one (usually more or less testaceous in the male, wholly black in female). But the colour is sometimes variable, and moreover it can be altered in old collection specimens by fat exuding to the surface.

In combination the above characters may help in identifying several natural species groups within the species-rich genus *Dromica* (sensu Wiesner 1992). Walther Horn (1926a) had already arranged all the species within nineteen different species groups, and moreover he subsequently (Horn 1929a) described *D. serietuberculata* which in his opinion would

constitute a 20th distinct group ("novam in genere sectionem constituens"). However, Horn's list would appear to include several inconsistencies. For instance, some of his groups do not seem to need separate grouping, such as his groups III ("bicostata-octocostata") and IV ("clathrata-Mauchi"), which were probably separated because of Horn's taxonomic use of filiform vs. foliated antennal character. In other instances, the inclusion of some species in some groups appears to be inappropriate, for instance Horn's inclusion of such varied species as *hildebrandti*, *erlangeri*, *bertolonii* and *nobilitata* within a subgroup ("Untergruppe B") of the "*clathrata-Mauchi*" group. Owing to his failure to study the aedeagus, one distinct full species (*prolongata*) was even described by Horn (1903a) as a subspecies of *bilunata*, when it clearly belongs to a different species-group.

Without attempting a full definite revision of the genus *Dromica*, this paper would like to present, as a overall result of my own consideration of several different morphologic characters, my personal attempt to identify the various natural groups which are recognizable in the present-day genus *Dromica*. In two instances at least ("auropunctata"-and "*clathrata*"-groups), the lack of inflated labial palpi, associated with other peculiar features, would appear to represent a character sufficiently important to imply separate generic status. New genera, therefore, are proposed below for two these species groups, based on the shape of the labial palpi, the shape of the pronotum, elytral sculpture, and the shape of the male aedeagus. Future research will probably lead to the re-establishment of the genus *Myrmecoptera*, and possibly to the creation of a few more generic stems.

DESCRIPTIONS OF NEW TAXA

Foveodromica new genus

(type-species: Dromica gracilis W. Horn, 1909)

I feel the need to create this new genus for a number of small species, forming the group "auropunctata" (XV Group, partim) of W. Horn (1926a), which all are recognizable because of several important characters, given here below, especially because of the slender, not inflated, labial palpi, and the peculiar elytral sculpture, which includes a row of larger round foveae, parallel to the suture, alternating with raised, impunctate areoles.

DESCRIPTION. Labial palpi slender, not inflated. Antennae filiform. Pronotum subsquare to subrectangular, transversely striated (the striae being finer or coarser, straighter or waved, depending on the species). Elytral markings consisting of a roundish to transverse submarginal spot in the middle and often also a subapical lunule, with no humeral dots in either sex, or, instead, of a narrow submarginal band from shoulder to apex, sometimes showing a tendency to be interrupted into two elongate submarginal lunules. Elytral sculpture including a typical longitudinal row of larger foveae, parallel to, but some distance from, the suture, included in, or alternating with, impunctate raised areoles in between. Aedeagus tapering, arc-shaped, typically more or less inflated dorsally after the middle, with a short blunt apex (figs 109-114).

This new genus is so named because of the conspicuous row of subsutural elytral foveae

CASSOLA CASSOLA

which is characteristic of all the sixteen species which the genus is known so far to include (gracilis, spinipennis, punctatissima, intermediopunctata, laterodeclivis, horii, profugorum, strandi, juengeri, wellmani, marginepunctata, humeralis, grossula, soror, auropunctata, densepunctata). All of these species are distributed from Angola to Shaba, NE Zambia, northern Malawi, up to NW Tanzania, thus showing a well-consistent geographical range, which obliquely crosses the whole of inland Central Africa from SW to NE.

Pseudodromica new genus

(type species: Dromica clathrata Klug, 1834)

I create here this second new genus for a number of larger species which formerly made up group III ("bicostata-octocostata") as well as part of Group IV ("clathrata-Mauchi") of W. Horn (1926a). These species are also characterized by non-inflated labial palpi, and moreover are easily recognizable because of their large size, the subsquare, typically tuberculated pronotum, and the very different shape of male aedeagus.

DESCRIPTION. Labial palpi not or poorly inflated. Antennae from filiform to more or less dilated, sometimes foliated. Elytral longitudinal costae or vittae present only in some species. Elytral markings variable, sometimes fully lacking, or reduced to a subapical spot or lunule, otherwise with two to three submarginal spots, in one instance (*albivittis*) with a continuous submarginal narrow band from shoulder to apex; sometimes a discal spot, a basal patch, or a apical trans-sutural spot, may also be present. Aedeagus bulky, tapering, with a short straight apical beak (figs 27, 115-128).

This new genus is so named because of its apparent similarity with *Dromica*. Shape of male aedeagus, however, makes it clear that this group, despite a superficial overall resemblance, possibly due to similar ecological requirements and convergent evolution, has nothing to do with *Dromica*.

Twenty-one species appear to belong to the new genus, mostly occurring in South Africa. However, the shape and pubescence of the pronotum help to identify three distinct species groups: the "clathrata-group" (with 17 species: clathrata, sculpturata, planifrons, pseudoclathrata, grandis, formosa, gunningi, oberprieleri, lerouxae nov., invicta, neavei, setosula, quinquecostata, tuberculata, octocostata, and probably albivittis and bicostata too), the "mauchii-group" (mauchii, marshalli), and the "polyhirmoides-group" (polyhirmoides, marshallana).

Dromica stalsi n. sp. (figs 6, 7)

DIAGNOSIS. A medium-sized *Dromica* species of the *marginella*-group, with filiform antennae; head and pronotum reddish-bronze, elytra black with a conspicuous, raised, longitudinal yellow band from shoulder to apex, which is as wide or more wide than the half of the elytral width. Labrum testaceous, darkened in front and behind and more narrowly on the lateral sides.

Type specimens. Holotype, ♀, from South Africa (Mpumalanga): Luipershoek Farm, near Roossenekal, at 25°07S-29°50E, 8 July 1990, L.G. le Roux leg., in the National Collection of Insects (Pretoria, RSA; NCI). One paratype, ♀, with same label data, in author's collection (FCC).

DESCRIPTION. Head reddish bronze above, bluish-green with some coppery reflections on cheeks, almost flat on vertex, with relatively small yellowish eyes, fully glabrous, with just two sensorial setae near the front and middle edges of each eye; surface evidently striated, the striae being finer, longitudinal and straighter on eyes and frons, concentric on vertex, obliquely and transversely waved behind. Labrum (female) as long as wide, four-haired, advanced in front edge into a tricuspidated turret, rather convex on disc, depressed on the lateral sides of base; testaceous, darkened in front and behind, and more narrowly on the lateral sides. Mandibles pitch-black, briefly testaceous on basal outer edge, almost completely covered by labrum when closed. Palpi testaceous, with the last joint of labial ones and the last two joints of maxillary ones shiny metallic dark; penultimate joint of the labial palpi strongly inflated, rounded and glabrous below, flattened and with hairy edges in its upper surface. Antennae filiform, relatively short, approximately as long as to the front quarter of the elytral length (expectedly longer in the male); scape pitch-black with some purplish reflections, a single erect seta on the tip; joints 2-4 bluish-green with violet reflections, a few short spines on their outer edges; antennomeres 5-11 dull brownishblack, finely and evenly pubescent.

Pronotum reddish-bronze, glabrous, slightly shorter (length: 2.4 mm) than wide (2.8 mm), subsquared, slightly restricted behind, with strong, waved, irregular or transverse striae all over the surface, the striae being transversely straighter near the epipleural rims. Episterna and sternum shiny bluish-black, glabrous; lower edge of mesepisterna with bronze to coppery-green reflections.

Elytra large, oval in shape, dull black, with almost no shoulders, slightly emarginated or subtruncated apically, with a very small apical spine in the sutural angle; sculpture constituted by many small, contiguous, pitted, evenly distributed foveoles, separated by sharp vertical walls between. Elytral markings very conspicuous, consisting in a broad, bright, yellow, longitudinal band on each elytron, reaching from the shoulder to the apex, slightly raised above the elytral surface, approximately as wide or more wide than the half of the elytral width, effacing the elytral sculpture underneath, and forming a marked step above the elytral surface on its inner edge. Epipleura metallic bronze with some greenish reflections.

Underside fully glabrous, with just two fine sensorial setae near the hind margins of the abdominal sternites 3-5; some white erect setae or setigerous punctures on the sides of the coxae. Trochanters dark rufous to pitchy black, a single seta on the tip of front and middle ones. Legs metallic bronze, with some greenish to violaceous reflections; a few rows of erect spiniform setae on all segments, some more hairs on the outer half of the middle tibiae (toilette tool).

Male unknown.

Length: 14.5-15 mm (without the labrum).

ETYMOLOGY. This beautiful, conspicuous, unexpected new Dromica species is warmly

CASSOLA CASSOLA

dedicated to Mr Riaan Stals, who is currently in charge of the tiger beetles in the National Collection of Insects, Pretoria, Gauteng, Republic of South Africa, and who kindly assisted me during my recent visit to that institution.

Habitat. The Luipershoek farm is about 3-4 hours' drive from Pretoria, and it consists of high-altitude grassland, mountainous terrain, riverine habitat, and afromontane forest (R. Stals, pers. comm.). What is strange about this species is that it was apparently found in the heart of the southern winter, which may well explain why such a conspicuous beetle has escaped intensive research so far.

Remarks. *Dromica stalsi* n. sp. is obviously a member of the *Dromica marginella* group. However, it is much larger than all the other species of this group, and moreover it is very distinctive because of the bright, yellow, wide, raised, longitudinal band of elytra. When males are eventually discovered, they will probably prove to be smaller than the females, with a straight tapering aedeagus, similarly as to that of the other species of this group.

Dromica schuelei n. sp. (figs 8, 9, 10, 11, 12)

Diagnosis. A close relative of *Dromica concinna* Péringuey, 1904, but smaller, with a shorter pronotum. Male aedeagus less straight, slightly twisted in the middle, with a slight dorsal concavity.

Type specimens. Holotype 3, allotype 4, and 12 paratypes (9 3 3 4 4) from South Africa (Northern Province): Louis Trichardt, Ben Lavin Nature Reserve, 29.I.2000, P. Schüle leg.. Eleven additional paratype specimens from same country and province: Louis Trichardt, 17-19.I.1999, P. Schüle leg., 1 4 (PSC); 22 km W Louis Trichardt, 28.I.2000, P. Schüle leg., 1 4 (PSC); Ben Lavin Nature Reserve, 23°08.5S-29°57E, 850m, 4.XII.1999, D. Brzoska leg., 1 4 (PSC); Griffin Mine [25°59S-30°31E, near Leydsdorp], 1 4 (FCC); "Kudu River", 1 4 (FCC); Moorddrift [24°17S-28°58E], 1 4 (FCC); Hwy R71, 7.5km E Gravelotte (Hy R40), 23°55S-30°40E, 5.XII.1998, D. Brzoska leg., 1 4 (DWBC). Holotype deposited in the Transvaal Museum (Pretoria, RSA; TMSA), allotype and 11 paratypes in Peter Schüle's collection (Düsseldorf, Germany; PSC), 2 paratypes in Karl Werner's collection (Peiting, Germany; KWC), 4 paratypes in David W. Brzoska's collection (DWBC), 6 paratypes in author's collection (FCC).

DESCRIPTION. Head with eyes as wide or slightly wider than the elytra, flattened above, slightly depressed on vertex, fully glabrous except for two sensorial setae or setigerous punctures near both eyes, with prominent, straight, parallel, longitudinal striae on eyes and cheeks, the striae being finer and concentric on frons, stronger and obliquely waved behind on neck. Colour black with some bronze reflections above; cheeks and antennal plates more or less metallic green with bluish to violet reflections. Labrum slightly wider than long, four-haired, with two deep incisions on sides of middle front margin; testaceous with narrowly dark outer edges in the male, more fuscous, sometimes almost wholly darkened, with the three blunt middle teeth distinctly produced outwards, in the female. Mandibles dark brown to pitchy black, slightly rufescent on teeth, briefly testaceous on basal outer

edge. Maxillary and labial palpi testaceous with the last joint pitchy metallic black; penultimate joint of the labial palpi strongly dilated as in most *Dromica* species, glabrous and convex below, flattened and with hairy edge in its upper surface. Antennae filiform, not dilated, approximately as long as to the elytral half in the male, shorter with the female; scape and articles 2-4 metallic pitchy black with green to bluish metallic reflections, a single seta or setigerous puncture near the tip of scape, a few spiniform setae on 3rd and 4th articles; antennomeres 5-11 slightly thicker, cylindrical, dull black, finely and evenly pubescent.

Pronotum glabrous, narrow, elongate, much longer (2.3-2.5 mm) than wide (1.4-1.8 mm), slightly narrowed behind, its maximum width near the front third, distinctly raised and convex, especially in the hind half of disc; fine, transversal, slightly waved striations on front, middle and hind lobes, the striae becoming straight at sides, near the epipleural rim; colour black with some bronze reflections on disc, metallic bluish-green near the side margins. Episterna fully glabrous, shiny, dark blue-violet to black, golden-green near the coxae; proespisterna dorso-ventrally striated in their upper side, mesepisterna with waved striation. Sternum glabrous, shiny metallic blue-green to black.

Elytra narrow, oval-shaped, elongate (length: 5.8-6.7 mm from hind apex of scutellum to tip of apical angle; width: 2.7-3.2 mm), with almost no shoulders, evenly ampliated in the middle, briefly truncated apically; outer apical edge slightly angular in the male, more rounded, with a small sutural spine in female. Colour dull black on disk, shiny metallic black on lateral sides, with some slight bluish-green reflections near the shoulders and in some larger elytral punctures; sculpture consisting of evenly spaced round punctures, quite apart from each other, separated by nearly smooth spaces, these punctures being larger and deeper in the front third of elytra, then becoming gradually shallower and smaller from the middle to apex. Elytral markings yellowish, consisting of a roundish to oval-shaped submarginal spot near the middle, a longer, narrow, posteriorly acuminate, subapical lunule, and, in the male, a small roundish humeral dot, markedly raised on the elytral surface. Epipleura rufescent to metallic bronze.

Abdominal sternites smooth, fully glabrous, with just 2-4 sensorial setae near the hind margins, metallic bluish-green to violet-black. Trochanters testaceous-rufous, femora dark bronze with greenish reflections, "knees", tibiae and tarsi more or less rufescent to dark brown, with a few rows of whitish spiniform setae on all segments and some more hairs on the outer half of the middle tibiae (toilette tool).

Male aedeagus 3.6 mm long, tapering, narrow, straight, slightly twisted in the middle, ventrally inflated, with a small concavity dorsally approximately at the distal third of its length.

Length: males 10.2-11 mm, females 11-12.2 mm (without the labrum and the sutural spine).

ETYMOLOGY. I have the pleasure of dedicating this nice new *Dromica* species to my friend and colleague Peter Schüle (Herrenberg, Germany), who personally collected most of the type specimens recently, thus finally allowing me to describe a species previously known to me by only a few old female specimens.

Remarks. Dromica schuelei n. sp. is obviously a close relative of Dromica concinna

Péringuey, 1904, which also occurs in the area, as well as of *Dromica transitoria* Pèringuey, 1896, which apparently has a slightly more southeastern distribution. From both these species, however, it can be immediately and easily distinguished because of the smaller size, the shorter pronotum, and the less straight, more twisted shape of male aedeagus. However, the knowledge of this group is far from complete. For instance, a pair of specimens in my collection, also from the Northern Province (Waterberg, Geelhoutbosch Farm), which I provisionally attributed to *concinna*, have slightly enlarged antennomeres 5-11, thus suggesting a distinct specific status. Owing to the scantiness of the material which I have seen so far, however, I think it better to defer any final verdict.

Dromica pseudotenella n. sp. (figs 13, 14, 15, 16, 17)

DIAGNOSIS. A small *Dromica* species of the *lepida*-group, very similar to *D. tenella* (Péringuey, 1893) in size and elytral sculpture and markings, but distinctive because of a shorter pronotum, with coarser waved striations.

Type specimens. Holotype, \eth , from South Africa, labelled "Zulul., Ndumu, XII.1960, van Son leg." (north-eastern side of KwaZulu/Natal province), and allotype, \Im , also from KwaZulu/Natal, 6 mi. S of Pongola, 7 February 1968, both in FCC collection. Twenty-one additional paratype specimens from KwaZulu/Natal (Ndumu NR, 23.XI.2001, P. Schüle, 5 \eth \eth 4 \Im PSC, 1 \eth 2 \Im FCC; 20 km E of Magudu, 18.I.2000, K. Werner, 1 \Im KWC; 18.I.2000, P. Schüle, 1 \Im 1 \Im PSC) and Swaziland (25 km E Piggs Peak, 14.XII.2000, K. Werner, 1 \Im 2 \Im KWC, 1 \Im FCC; 23 km ESE Piggs Peak, 21.XI.2001, P. Schüle, 1 \Im FCC, 1 \Im PSC).

DESCRIPTION. Head with eyes slightly narrower than the elytral width, depressed on vertex, with rather prominent longitudinal striations, straighter on frons, cheeks, and eyes, more waved on vertex, and obliquely to transversely waved behind on neck; fully glabrous except for two sensorial setae or setigerous punctures near both eyes. Colour more or less metallic coppery-red with some green reflections, especially on clypeus, in front of eyes, and on cheeks. Labrum testaceous, four-haired, with two incisions on the sides of the middle front margin, slightly convex on disc; shorter than wide, almost truncated in front, in the male, the three middle teeth more protruding in the female. Mandibles almost wholly covered by the labrum at rest, testaceous on the basal outer edge, rufescent to brownish on the teeth. Maxillary and labial palpi testaceous with the last joint metallic dark; penultimate joint of the labial palpi strongly dilated, glabrous and convex below, flattened and with hairy edges in its upper surface. Antennae lacking in the male holotype, reduced to just the first six antennomeres in the female allotype; filiform, not dilated, with scape and articles 2-4 metallic dark bronze with green to violet reflections, articles 3 and 4 distally annulated with testaceous-cupric in some specimens; a single seta or setigerous puncture near the tip of scape, a few spiniform setae on articles 3 and 4, distal antennomeres dull black, finely and evenly pubescent.

Pronotum longer (2-2.1mm) than wide (1.5-1.6 mm), though evidently shorter than that of *D. tenella*, espeially in males, a bit raised and convex on disc, parallel-sided on the middle lobe, then rounded and constricted behind, with rather strong, more or less wavy,

transversal striations on front, middle and hind lobes, the ones on the middle lobe being less than 18-21 in number (in contrast, these striae are finer, more regular, and more numberous, in *D. tenella*); colour more or less copper-red as on the head, with some greenish reflections on the disc, in the front and hind constrictions, and along the epipleural rim. Episterna glabrous, metallic cupreous-green to violet-black, more or less shallowly wavy in dorso-ventral direction, otherwise smooth. Sterna glabrous, smooth, metallic golden green with cupric reflections.

Elytra oval-shaped, wider and more convex in the female, with almost no shoulders, ending into a short, sharp, protruding, slightly diverging, apical spine in both sexes, which is longer in the male. Colour dark bronze with a strong coppery overall gloss, the reflections being bluish-green in many punctures of the elytral sculpture, which consists of many, roundish to polygonal, contiguous, evenly distributed punctures, the punctures becoming shallower, more open, tending to coalesce transversally in the hind half of the elytral length. Elytral markings identical with those of *D. tenella*, with no humeral dot in either sex, a conspicuous, raised, ivory narrow band from below the shoulder to the base of the sutural spine, and moreover a roundish to oval-shaped discal spot behind the middle. Epipleura rufescent to metallic bluish-green.

Abdominal sternites glabrous, smooth, bluish-green to violet, the first two visible ones finely wrinkled longitudinally. Coxae metallic bluish-green to cupric, with some sparse white pubescence at sides; trochanters testaceous-rufescent, femora mostly testaceous, more or less metallic green on basal half, tibiae testaceous with a metallic hue apically, tarsi more or less metallic violet; a few rows of white erect setae on femora, a few spiniform small setae on tibiae and tarsi, some more hairs on the outer half of the middle tibiae (toilette tool).

Male aedeagus narrow, tapering, slightly arc-shaped, very slightly hooked dorsally at apex, practically identical to that of *D. tenella*, but slightly shorter.

Length: 9.7-10.5 mm (without the labrum and the sutural spine).

ETYMOLOGY. This small, puzzling, new species is so named because of its great similarity with *D. tenella*, a species which it has to be distinguished from because of the different shape and sculpture of the pronotum.

REMARKS. *Dromica pseudotenella* n. sp. is obviously a close relative of *D. tenella*, which also occurs in the same geographical area (type locality: Barberton, Mpumalanga). However, *pseudotenella* can be distinguished from it because of the shorter pronotum, the roughly coarser pronotal sculpture, and the stronger copper-red colour of head and pronotum. The few distributional data would indicate it to be restricted to Swaziland and NE Kwazulu/Natal (Ebombo) only. More specimens are likely to be found in the entomological collections, ranged under *tenella*.

Dromica paulae n. sp. (figs 18, 19, 152)

Diagnosis. A *Dromica* species of the *schaumi-batesi*-group, similarly sized as *D. taruensis* Kolbe, 1897, but with labrum, articles 1-4 of antennae, and legs, fully testaceous-rufous. Male unknown.

Cassola Cassola

Type specimen. Holotype, \$\,\text{, from coastal Kenya: S of Malindi, Arabuko-Sokoke Forest, 28 April 1995, F. & P. Cassola leg., in author's collection (FCC).

DESCRIPTION. Head very large if compared to pronotum; vertex slightly raised in the middle, with a shallow depression in front on both sides; surface glabrous, except for 4-5 erect white setae on each side of the frons, 4-5 decumbent setae sparsely on cheeks, and 1 erect weak seta on each side of neck. Sculpture fine but prominent, with longitudinal straight striae on frons, eyes and cheeks, the striae becoming coarser and wavy on vertex and transversely behind on neck. Colour light metallic bronze with some coppery reflections, dark bluish-green on the gular area. Labrum of female approximately as long as wide, testaceous, four-haired, clearly tri-dentate in the middle, the three median teeth separated by a deep incision on both sides. Mandibles testaceous on the outer base, rufescent above and on teeth, margins of inner teeth narrowly darkened. Maxillary and labial palpi testaceous with the last joint metallic dark; penultimate joint of the labial palpi strongly inflated as in most Dromica species, glabrous and convex below, flattened and with hairy edges in its upper surface. Antennae rather short, approximately as long as to the front third of the elytral length, expectedly longer in the male. Scape testaceous, a single long seta on the tip; articles 2-4 testaceous, with 2-5 short white spiniform setae; articles 5-11 dull black, moderately dilated but not foliated, finely and evenly pubescent. Pronotum longer than wide, strongly constricted in front and behind, the front collar larger and wider, the middle lobe nearly rounded, globose; sculpture with fine, irregular, transversal, waved striations on front, middle and hind lobes, the striae becoming straighter and more evident on sides, near the epipleural rim. Colour as on the head, light metallic bronze with coppery reflections. Proepisterna dark bronze to violet-black, smooth, glabrous, with a few white setae on the ventral side; meso- and metepisterna also violetblack, covered with white semi-erect setae; sternum dark bronze, copper-red at the sides, also covered with white semi-erect setae, especially on the sides of metasternum.

Elytra oval-shaped, with no shoulders at all, rounded and convex in the middle, ending in a sharp, long, protruding apical spine, slightly overlapping each other on both sides of the sutural angle. Colour dark bronze, almost black on the disc, with some metallic cupreous shine on the lateral sides. Sculpture consisting of many small, contiguous, pitted punctures on disc, the punctures being shallower, smaller and rounded on the humeral area and on the sides. Elytral markings very similar to those of *D. taruensis*, yellow, poured on the sculpture, with some rows of punctures appearing through, consisting of a short, subtriangular basal patch in the front disc of the elytra, a subapical lunule from behind the middle to the apical angle, and a discal roundish spot which is widely connected with the front part of the subapical lunule and also shows a tendency to narrowly coalesce with the basal patch too. Epipleura testaceous, narrowly bordered with metallic bronze.

Abdomen pitchy-brown to black, with some greenish reflections, the last sternite narrowly lighter on the hind border; sides of abdominal sternites sparsely covered with white decumbent setae. Coxae metallic bronze to cupreous, trochanters and legs fully testaceous, briefly darkened on the apex of the tibiae and the tarsal segments; a few rows of whitish spiniform setae on femora, tibiae and tarsi, and some more hairs on the outer half of the middle tibiae (toilette tool).

Male unknown.

Length: 11.7 mm (without the labrum and the sutural spine).

ETYMOLOGY. I have the pleasure of dedicating this small, distinctive, new *Dromica* to my wife Paola, who helped in collecting it at the Arabuko-Sokoke Forest, and for long time is patiently supporting and encouraging my time-consuming fondness for the tiger beetles.

REMARKS. The Arabuko-Sokoke Forest in coastal Kenya (fig. 152) is a well-known, very interesting biotope, which despite its small size has several important faunal elements, including three endemic birds (Collar & Stuart 1985), and an endemic mongoose among the mammals (Fanshawe 1994). As far as tiger beetles are concerned, I myself described from this same type locality, a few years ago, a new species (*Elliptica kenyana*) and a new subspecies (*Lophyra neglecta sublitoralis*) (Cassola 1995). The single holotype specimen of this small new *Dromica* species was collected along a path in the forest, syntopically with two congeneric species, *D. schaumi* and *D. kenyana*.

Dromica zambiensis n. sp. (figs 20, 21, 22, 23, 24)

DIAGNOSIS. Obviously a close relative of *D. mesothoracica*, however differing with a differently sculptured pronotum, which is narrower, slightly longer, with finer subparallel transversal striae, instead of courser irregular waved striae as those of *D. mesothoracica*. Apex of male aedeagus a bit shorter, less narrow.

Type specimens. Holotype 3, allotype 3, and 11 paratype specimens (9 3 3 2 3 3 from Zambia: "N.W. Rhodesia, Mwengwa, 27°40E-13°S, H.C. Dollman", collected respectively on November 4 (1), 8 (1), 13 (1), 16 (5), 17 (4) and 19 (1), 1913; all in the Natural History Museum (London, U.K.; BMNH), except for two paratype specimens in FCC (1 3 1 3). Additional forty-three paratype specimens from other Zambian localities: "N.W. Rhodesia, Kashitu, N of Broken Hill, November 1914, H.C. Dollman" (1 3 FCC, 4 3 3 3 BMNH); "N. Rhodesia, N'Changa, C.T. Macnamara, B.M. 1931-179" (2 3 3 BMNH, 1 3 FCC); Mazabuka, 1400 m, XII.1986, F. Ferrero (1 3 2 3 KWC); Kafue City, Kafue River, 1200 m, XII.1986, F. Ferrero (4 3 3 3 FCC); Kafue City, Kafue River, 1200 m, 22.XI-2.XII.1987, R. Mourglia (3 3 3 3 FCC); Kafue, I.1988, F. Ferrero (1 3 FCC); Kafue, Kafue River, XII.1989, Minetti leg. (3 3 3 4 4 PSC, 2 3 3 KWC); Kasanka Nat. Res. Waka Camp, 12°30S-30°15E, 14-20.XII.1989, P. Reavell (1 3 1 3 NCI). Two additional non-type male specimens from "N.W. Rhodesia, Solwezi District, 26°20E-12°10S; Brit. Mus. 1919-79" (BMNH). Further specimens may lie in several collections, incorrectly identified, by me too, as *D. mesothoracica*.

DESCRIPTION. Head rather large, flattened above, glabrous except for two sensorial setae or setigerous punctures near both eyes; sculpture made up with rather strong rough striae, concentric on frons, longitudinal on vertex, a bit rounded on eyes, transversely waved behind on neck; cheeks with finer shallower striae, becoming wavy behind on neck. Sculpture of clypeus nearly effaced, much finer, smooth. Colour shiny black, with some cupric-bronze to bluish reflections. Labrum of male shorter, transverse, wider than long, four-haired, widely testaceous on the outer margins, pitchy brown to black on base and disc, with two small incisions on the sides of the middle front margin; longer, nearly as

Cassola Cassola

long as wide, fully black, in female, the three middle teeth distinctly produced outwards. Mandibles pitchy black on teeth and apical half, briefly testaceous on the basal outer dorsal edge, metallic greenish on the basal ventral edge. Maxillary and labial palpi rufescent with the last joint metallic dark; penultimate joint of labial palpi strongly inflated, glabrous and convex below, flattened and with hairy edges in its upper surface. Scape and articles 2-4 of antennae metallic shiny black, with bluish to violet reflections, a single erect white seta near the tip of scape, a few more decumbent white seta on side of scape (often rubbed-off), some short, darker, spiniform setae on 3rd and 4th articles; antennomeres 5-11 black, strongly foliated, finely and evenly pubescent.

Pronotum much longer (nearly two times) than wide, slightly wider in front, parallel-sided, with the epipleural rims conspicuous and raised all along the sides of the middle lobe; transversely striated on disc, the striae being fine but evident, parallel, regular, not or just poorly waved on sides. Colour shiny black with some slight bluish to violet reflections. Sterna and episterna dark blue-violet to black, shiny, fully glabrous.

Elytra oval-shaped, elongate, wider and more convex in the female, with almost no shoulders, ending into a sharp, protruding, apical spine in the male, the spine being small, much shorter, in female. Colour dark bronze to black, with a metallic shine on shoulder and outer edge, some bluish to cupric reflections on the lateral sides. Sculpture consisting of many polygonal, contiguous, pitted, evenly distributed open foveoles, arranged in longitudinal rows, each row being separated from the contiguous ones by sharp irregular walls; sutural rim prominent, slightly raised on the elytral surface. Elytral markings similar to those of *D. mesothoracica*, consisting of a subapical lunule from the middle to the sutural angle, a wide transversal median band on disc (laterally connected with the side lunule), and a second shorter discal spur (sometimes lacking or poorly obvious) before the apex; markings are poured on the elytral surface, leaving the longitudinal rows or the elytral punctures visible in between. Epipleura metallic metallic bronze, sometimes slightly rufescent.

Abdominal sternites glabrous, pitchy brown to black, with some metallic hue on the sides of the first visible segments; glabrous, 2-4 long sensorial setae on hind edges of forth and fifth visible sternites. Sides of coxae with white decumbent setae, trochanters pitchy black, femora dark bronze with greenish reflections above and on "knees", tibiae largely rufescent, tarsi more or less metallic greenish bronze; femora sparsely pubescent, a few rows of whitish spiniform setae on tibiae and tarsi, with some more hairs on the outer half of the middle tibiae (toilette tool).

Male aedeagus tapering, only slightly arc-shaped, not much inflated in the middle, with a short dorsal apical hook.

Length: ♂ 12.5-14 mm, ♀ 13.5-15.5 mm (without the labrum and the sutural spine).

ETYMOLOGY. This interesting new *Dromica* species, which at first I had ascribed to *D. mesothoracica*, from southern Zaire (Shaba), is so named from the region (central-western Zambia) where it comes from.

Remarks. The group of *D. mesothoracica* definitely would need to be revised, as further distinct species may prove to be involved in. Apart from the new species described above, the supposed subspecies *prolongatesignata* W. Horn, 1925 also seems to deserve separate

specific status, and moreover two specimens from "Kundelungu (Katanga)" (FCC) also appear to represent a further distinct species. Future research and collecting will likely reveal additional species or help to fully understand the taxonomic relationships between the involved forms.

Dromica brzoskai n. sp. (figs 129, 130, 131, 132, 133)

DIAGNOSIS. Obviously a close relative of *D. limpopoiana*, however differing with the slightly smaller size, the finer elytral sculpture, the shorter elytral costa, the more advanced middle elytral spot, and the longer subapical lunule.

Type specimens. Holotype \Im , allotype \Im , and 2 paratype specimens (1 \Im 1 \Im) from South Africa (Northern Province): Hy R525, 34 km E Tshipise, 22°28.7S-30°27.1E, 26.XI.1999, D.W. Brzoska leg.; six additional paratype specimens from the same area: Tshipise Adventure Eco., 22°36.6S-30°10.7E, 22.XI.1998, D.W. Brzoska, 1 \Im ; Tshipise Adventure Eco., 22°26.1S-30°32.9E, 23.XI.1998, D.W. Brzoska, 1 \Im ; Tshipise Adventure Eco. Lodge, 22°36.6S-30°10.6E, 27.XI.1999, D.W. Brzoska, 1 \Im ; MessinaNR, 22°215 - 30°03E 14.XII.2000 Müller & Burger 1 \Im 2 \Im Holotype deposited in the Snow Entomological Museum at the University of Kansas (USA); allotype and three paratypes in D.W. Brzoska's collection (DWBC); 2 paratypes \Im in author's collection (FCC); 2 paratypes \Im in TMSA, 1 paratypes \Im P. Shule's collection (PSC).

DESCRIPTION. Head relatively small, moderately excavated above, glabrous except for two sensorial setae or setigerous punctures near both eyes, black with some bronze-green reflections on eyes, clypeus and genae; sculpture made up with fine but evident striae, concentric on frons, longitudinal on vertex and eyes, transversely waved behind on neck; cheeks with finer shallower waved striae. Sculpture of clypeus nearly effaced, much finer, isodiametric. Labrum of male transverse, wider than long, four-haired, widely testaceous on disc, with the front edge and the base pitchy black; outer side margins also narrowly blackened; longer, nearly as long as wide, fully black with side margins more or less testaceous, in female, the three middle teeth distinctly produced outwards. Mandibles shiny black, briefly testaceous on their basal side edge only. Maxillary and labial palpi testaceous with the last joint metallic dark; penultimate joint of labial palpi strongly inflated, glabrous and convex below, flattened and with hairy edges in its upper surface; second joint of maxillary palpi also obviously inflated. Scape and articles 2-4 of antennae metallic shiny black, with some bluish to violet reflections, a single erect white seta near the tip of scape, some short black spiniform setae on the outer sides of 3rd and 4th articles; antennomeres 5-11 black, strongly foliated, finely and evenly pubescent.

Pronotum nearly one and half times longer than wide, slightly wider in front, then subparallel-sided, with the epipleural rims conspicuous and raised at sides of middle lobe; middle lobe transversely striated on disc, the striae being 22-24 in number, evident, parallel, regular, not or poorly waved on sides. Colour shiny black with some slight bluish to violet reflections. Sternal pieces dark blue-violet to black, shiny; episterna fully glabrous, sides of sterna covered with a white erect pubescence.

Elytra oval-shaped, elongate, ampliated past the middle, wider and more convex in the

CASSOLA CASSOLA

female, with almost no shoulders, ending into a sharp, protruding, straight apical spine in the male, the spine being very small in the female. Colour black, with some slight metallic shine along the suture, the elytral costa and the outer edges. Sculpture consisting of many polygonal, contiguous, pitted, evenly distributed open foveoles, larger in front, smaller behind, with sharp irregular walls in between; a slightly raised irregular costa, parallel to the suture but some distance from, running from the base to nearly the median part.

Yellowish elytral markings similar to those of *D. limpopoiana* m. *speciosa*, consisting of a small humeral patch (present in the male holotype only, lacking in all the other type specimens), a long subapical lunule (running from the apex up to nearly the middle of the elytral side margin), and a median, discoidal, oval-shaped spot above the end of the subapical lunule, tending to coalesce with it in the female allotype specimen; elytral punctures visible on the elytral discal spot too. Epipleura more or less rufescent in front, then pitchy black to metallic bronze.

Abdominal sternites fully glabrous, black with some bluish-violet reflections. Lateral sides of coxae with white decumbent hairs, trochanters pitchy black to dark rufous-brown. Femora bronze black with violet reflections, tibiae more or less tinged with rufous, tarsi shiny black; a few rows of small white hairs on femora, some small spiniform setae on tibiae and tarsi, some additional fine hairs on outer half of middle tibiae (toilette tool).

Male aedeagus nearly identical to that of *D. limpopoiana* (fig. 100), large, long, straight, dorsally hooked at apex.

Length: $\eth \eth \eth 16.2$ -16.5 mm, $\Im \Im 17.3$ -18.5 mm (without the labrum and the sutural spine).]

ETYMOLOGY. I have the pleasure of naming this interesting new *Dromica* species after its first collector, my friend Dr David W. Brzoska (Lawrence, Kansas, U.S.A.), perhaps the most active tiger beetle collector presently in the world.

REMARKS. *D. brzoskai* n. sp. is definitely a close relative of *D. limpopoiana* and its allied species. However, it can be distinguished from Péringuey's species because of the slightly smaller size, the elytra more elongated behind, the shorter elytral costa, the finer elytral sculpture, and the different elytral markings, which include a longer subapical lunule (more advanced toward the half of the elytral margin), a smaller discal spot, placed more in front, almost in the middle of the elytron, and sometimes a short humeral patch (placed more laterally than the basal patch of *limpopoiana* and *oneili*). From *D. prolongata* (fig. 102), which also resembles it very much, especially because of the elytra elongated behind, *D. brzoskai* n. sp. can be easily told apart by the differently shaped male aedeagus.

Pseudodromica lerouxae n. sp. (figs 25, 26, 27)

DIAGNOSIS. A rather large species of the *clathrata*-group, black, with five longitudinal costae and three conspicuous yellow spots on each elytron. Labrum testaceous, antennae foliated, pronotum longer than wide, rectangular-shaped.

Type specimen. Holotype, &, from South Africa (Mpumalanga): Luipershoek Farm, near Roossenekal, at 25°07S-29°50E, 8 July 1990, L.G. le Roux leg., in the National Collection of Insects (NCI), Pretoria, RSA.

Description. Head black, with bronze reflections, almost flat on the vertex, with relatively small yellow eyes; surface glabrous, with just the two ordinary sensorial setae near front and middle edges of each eye, and moreover 3-4 erect white hairs in a longitudinal row on both sides of frons; evident but relatively fine striae all over the surface, the striae being finer and straight on eyes and cheeks, concentric on frons, transversely waved behind on neck. Labrum (male) short, testaceous, four-haired, wider than long, poorly advanced in front edge, rather convex on disc, with a conspicuous depression on both sides of the base. Mandibles pitchy black, briefly testaceous on the basal outer edge. Maxillary and labial palpi testaceous, with the last joint metallic dark; penultimate joint of the labial palpi poorly dilated, glabrous and rounded below, flattened and with hairy edges on its upper surface. Antennae black, foliated, approximately as long as to the front third of the elytral length (expectedly shorter in the female); scape and articles 2-4 with some metallic hue, a fan of 3-4 erect setae on tip of scape, 6-7 short spines on the outer edges of 3rd article, 1-2 more on the 4th, antennomeres 5-11 dull black, strongly enlarged and depressed from 5th to 9th, then progressively narrowed, finely and evenly pubescent.

Pronotum black, glabrous, distinctly longer (3.9 mm) than wide (3.1 mm), subrectangular in shape, with strong waved striae on front and hind lobes, the striae being lighter, straighter and more transverse (only slightly obliquely descending on disc) on the middle lobe, which moreover is produced in two long roundish gibbose protuberances behind. Episterna pitchy black, glabrous, with some bronze to bluish reflections; some dorsoventral waved striae only in the upper part of proespisterna and on mesepisterna.

Elytra shining black, oval-shaped, elongate (10.5 mm from hind apex of scutellum to tip of apical spine), with almost no shoulders, ending into a short, sharp, protruding, apical spine, the spines slightly diverging from each other. Elytral sculpture rather strong in the front half, with five raised, parallel, longitudinal costae on each elytron, the three inner ones ending approximately past the middle, behind the middle spot of the elytra, the outer two ones shorter, ending approximately near the front edge of the middle yellow spot; intervals between the costae transversely intersected by parallel transverse carinae that circumscribe rectangular, rather deep, irregular reticulations. Apical third of elytra contrasting with the front parts, covered with smaller round open punctures which become progressively smaller near the apex. Elytral markings very conspicuous, yellow, slightly raised on the elytral surface, with the sculpture appearing through, consisting of a broad elongate humeral spot, extending approximately between the 2nd and the 5th longitudinal costae, a larger roundish submarginal spot around the middle, reaching internally the edge of the 3rd costa, and a longer, marginal, continuous apical lunule from below the middle spot to the apical angle. Sutural spines short but rather strong, epipleura testaceous to rufescent.

Underside nearly glabrous, with some erect white pubescence on the sternum, the coxae and the lower sides of pro- and meso-episterna. Abdominal segments shining black, smooth, fully glabrous. Trochanters rufous to pitchy black, a single seta on the tip of front and middle ones. Legs black with some violaceous reflections, front tibiae slightly rufescent basally; some rows of erect spiniform setae on all segments, and moreover a more dense pubescence on the outer half of the middle legs (toilette tool) and below the three basal joints of the front tarsi (mating male tool).

Cassola Cassola

Male aedeagus bulky, massive, slightly curved, widened in the middle, with a long dorsal opening in its outer half and a short straight beak apically. Female unknown.

Length: 18 mm (without the labrum and the sutural spine).

ETYMOLOGY. This beautiful, large, unexpected new *Pseudodromica* species is so named because it is dedicated to Mrs. Lulu le Roux, who was in the Entomology classes in South Africa, and collected the single holotype specimen over ten years ago, then later specialised in Botany and moved to America (R. Stals, pers. comm.). Before leaving, Mrs. le Roux deposited her insect specimens in the NCI collection, where I have found this specimen in January 2000, on the occasion of a short personal visit to such an institution.

Habitat. As it has been reported above, the Luipershoek farm is about 3-4 hours' drive from Pretoria, and it consists of high-altitude grassland, mountainous terrain, riverine habitat, and afromontane forest. Curiously, as for the co-occurring *D. stalsi*, described above, *P. lerouxae* was apparently found in the heart of the southern winter, which may well explain why such a conspicuous beetle has escaped intensive research so far.

REMARKS. *Pseudodromica lerouxae* n. sp. is obviously a member of the *clathrata-tuberculata* group, as the shape of pronotum and the male aedeagus clearly demonstrate. From all the other species of such a group, however, it can be immediately and easily distinguished because of its conspicuous, distinctive, yellow elytral maculation.

ECOLOGY

As pointed out above, all *Dromica* are typical inhabitants of the African savannahs, grasslands and semideserts, where they are diurnal, flightless, cursorial, ground predators. In turn, they are likely preyed upon by a number of vertebrate predators, a situation which has probably enhanced their pronounced fast-running habits as well as similarities of elytral patterns and general appearance. Poorly known mimicry chains can be postulated in several instances, which may involve other participants too, such as carabid beetles (Cassola 1986a, Cassola & Vigna Taglianti 1990) or mutillid wasps (Marshall & Poulton 1902, Carpenter 1936, Burgeon 1937) (figs 64, 165, 166).

Interestingly enough, no counterparts of *Dromica*s are known from similar habitats in other parts of the world. Apart, perhaps, for a couple of *Jansenia* species in southern India [*J. westermanni* (Schaum, 1861), *J. pseudodromica* (W. Horn, 1932)], which are morphologically strongly reminiscent of small-sized *Dromica* species, and probably occupy a similar ecological niche (Acciavatti & Pearson 1989; author's personal observations, 1998), there are no other species-rich genera of flightless, fast running tiger beetle predators in the grassland or savannah-like habitats of any continent other than Africa.

In several African countries, such as in Malawi, the greatest numbers of species are found in the mid-altitude zone ("Lake shore and Rift Valley environments are poorly

represented *Dromica* is clearly a woodland genus in Malawi, favouring altitudes of 900-1400 m and rainfall of 1000-1300 mm": Werner & Dudley 1998). Occasional evidence, such as the discovery of two new conspicuous South African species (see above), would show that some species at least may apparently be active, and should be searched for, in the heart of the southern winter. If such a biological feature will be confirmed, it would well explain why these species have escaped intensive research so far, and suggest that further, presently unknown, species may well exist even in well-known areas.

No *Dromica* larvae were known (Putchkov & Arndt 1994) until Arndt (1998) described the third instar larva of *clathrata*. Judging from the few available data, *Dromica* larvae appear to have the most derived character states among all the known larvae of Prothymina (Arndt & Cassola 1999). Recent work on rearing *Dromica* in captivity will soon lead to a better knowledge of larval instars of several more species (Oesterle, pers. comm.; Schüle, pers. comm.). Recently (Schüle, pers. comm.; Bologna, pers. comm.), an adult specimen of *Dromica* was found holding a grasping phoretic Meloid triungulin larva of the genus *Cyaneolytta*, an association which was previously known only with Anthiini ground beetles (Bologna et al. 1990).

BIOGEOGRAPHY

A study of the geographical distribution of the genus *Dromica* will doubtless provide insights into its origin and evolution. The fact that there are no *Dromica*-homologous elements on other continents or regions, including Madagascar, is consistent with the view that the genus is an African endemic, which probably originated autonomously in southern Africa after the disruption of Gondwanaland (Jeannel 1961). The dispersal and evolution of *Dromica* should therefore have started from a southern stock, slowly moving northwards within all suitable habitats and thus outside high deserts and tropical forests.

The absence of *Dromica*-like elements on Madagascar (where savannahs occur too) and the occurrence of such a closely related species as *Socotrana* on Socotra Island (fig. 1) could hardly be explained if Socotra should prove to be a fragment of the subunit of Gondwanaland known as Sudamadia rather than simply an off-shore fragment of Somalia. Socotra is known to be one of the "most isolated pieces of land" in the history of the Earth (Kossmat 1907), and it probably represents part of a fault block separated from the mainland by the same series of dislocations that produced the Gulf of Aden in Tertiary times (Cassola & Wranik 1998). Such a separation would go back about 60 millions years, long after the separation of Madagascar from Gondwanaland in Permian times (Brenon 1972), and as a consequence the genus *Dromica* must have evolved between the two events, thus emerging as a very ancient tiger beetle stem. Adaptation of *Dromica* to flightless, cursorial habits, as well as the lack of extensive marine interludes on the African continent, doubtless favoured the multiplication of species and the spread of the genus, despite the limited mobility of the individual beetles, from southern Africa all the way to the Sahelian borders, a process which would probably still be operating

today were it not for the constraints introduced by human activities.

Conclusions

Future specialized research in the many, huge, poorly known countries of central and southern Africa will probably lead to locate and discover many more, presently unknown, *Dromica* species, thus further increasing the number of specific or subspecific taxa that occur in the African wilderness. In fact, to flightless creatures as *Dromica* are, dispersal should probably be made slower or more difficult by the huge distances and many geographical barriers, thus facilitating individual variation and local speciation. In contrast, only a few geographical subspecies can presently be individuated and accepted. Most of the so-called subspecies recognized by Walther Horn in his later papers (1926a, 1929a, 1940), have turned out to rather be either mere individual variations or full separate species. Quite surprisingly, most *Dromica* species appear to change little geographically, and mostly have apparently rather restricted, local distributions.

On the other side, Africa is changing quickly. Increase of human population is rapidly producing conversion of grasslands and savannahs into agricultural lands, thus disrupting, rarefying or destroying faunal assemblages and invertebrate communities outside the national parks and other protected areas. Many localized species or local populations may even disappear previous than their discovery and comprehension can be made. Thus, it is definitely the time for increasing research and collection of representative specimens of the various populations as soon as possible. What is needed for is not the just casual collecting of individual specimens by unexperienced voyagers or resident people, but the search for reasonably long series of specimens, together with precise locality data and ecological and behavioural observations, by dedicated specialist entomologists or well trained local people.

A plea should finally be made for the proper protection and securing of as many representative portions of the various African habitats and biomes as possible, not only to give a chance to the unique landscapes and vertebrate faunal communities to survive (to steadily represent the basis for future touristic sustainable exploitation and economic income), but also to ensure the continuity of the still poorly known invertebrate communities of these ecosystems, as they are efficaciously represented by these small, speedy, flightless creatures of the African savannahs.

APPENDIX I DESCRIBED TAXA

The list below includes all the names which have been hithertho published in the genera *Dromica*, *Myrmecoptera* and *Cosmema*, or which have been someway connected to them in entomological literature. In sequence, the following information is given: 1. name, 2. describer, 3. year of description, 4. original spelling and combination, 5. literature reference, 6. ranging and combinations in subsequent literature, with special reference to Horn's (1926a), Wiesner's (1992) and Werner's (2000a) catalogues, 7. ranging and combination (if different) adopted in the present paper, 8. type specimens, 9. type locality, 10. known depositories of type specimens, 11. examination of type specimens, 12. published illustrations, 13. distributional data, 14. reference literature items, 15. reference collections examined, 16. remarks (when necessary).

For example:

- [1] GROSSULA
- [2] W. Horn,
- [3] 1914
- [4] Dromica (Cosmema) grossula
- [5] Horn, 1914a: 12
- [6] Dromica grossula, XV. Gruppe "transitoria-auropunctata-elegantula"; Horn 1926a: 94
- [6] Dromica grossula; Wiesner 1992: 67, Werner 2000a: 177
- [7] Foveodromica grossula (comb. n.)
- [8] "2 \$ \$, \$ \$"
- [9] "Angola (ex coll. V. Plason)"
- [10] 2 ♂♂ (DEI), 1 ♀ (DEI)
- $\lceil 11 \rceil !$
- [12] Habitus (Werner 2000a, colour fig. 170) ...
- [13] <u>Country</u>. *Province*: locality
- [14] (Werner 2000a;
- [15] MRAC).
- [16] Remarks.

Reference or depository collections and collections which have been examined are indicated as follows:

ABC Arnaldo Bordoni Collection, Florence, Italy

ACBRI Agriculture Canada, Biosystematics Research Institute, Ottawa, Ontario, Canada

AEUT Agricultural Entomology (Entomologia Agraria), University of Turin, Italy

AOC Andreas Oesterle Collection, Winnenden, Germany

AVC Alfried Vogler Collection, Natural History Museum, London, Great Britain

BMNH Natural History Museum, London, Great Britain

BVNC C.M.C. Brouerius van Nidek, Voorburg, Nederland

Cassola Cassola

Deutsche Entomologische Institut, Eberswalde, Germany

DEI

CAS	California Academy of Sciences, San Francisco, California, USA
CIC	Cesare Iacovone Collection, Atessa, Italy
CMNH	Carnegie Museum of Natural History, Pittsburgh, Pennsylvania, USA
CROC	Colin R. Owen Collection, Somerset West, South Africa
DEUP	Department of Entomology, University of Pretoria, South Africa
DLPC	David L. Pearson Collection, Tempe, Arizona, USA
DWBC	David W. Brzoska Collection, Lawrence, Kansas, USA
EAC	Erik Arndt Collection, Bernburg, Germany
EWC	Erik Werner Collection, Höchstadt, Germany
FCC	Fabio Cassola Collection, Rome, Italy
FMNH	Field Museum of Natural History, Chicago, Illinois, USA
GAC	Gianni Alberghini Collection, Bologna, Italy
GZC	Gario Zappi Collection, Casalecchio di Reno, Italy
HFHC	H.F. Howden Collection, Ottawa, Canada
HSC	Hirofumi Sawada Collection, Aomori, Japan
IANL	Instituto de Investigação Agronomica, Nova Lisboa, Angola
IRSNB	Institut Royal des Sciences Naturelles de Belgique, Bruxelles, Belgium
ITZ	Instituut voor Taxonomische Zoölogie, Amsterdam, The Netherlands
JMC	John E. Miskell Collection, Geneseo, New York, USA
JMCB	Jiri Moravec Collection, Adamov u Brno, Czech Republic
JPC	Johann Probst Collection, Wien, Austria
JWC	Jürgen Wiesner Collection, Wolfsburg, Germany
KWC	Karl Werner Collection, Peiting, Germany
MBL	Museu Bocage, Lisboa, Portugal
MCZR	Museo Civico di Zoologia, Rome, Italy
MDA	Museu do Dundo, Dundo, Angola
MHC	Michio Hori Collection, Wakayama, Japan
MHNG	Muséum d'Histoire Naturelle, Geneva, Switzerland
MIBC	Malawi Invertebrate Biodiversity Centre, Blantyre, Malawi
MNHN	Muséum National d'Histoire Naturelle, Paris, France
MRAC	Musée Royal de l'Afrique Centrale, Tervuren, Belgium
MRSN	Museo Regionale di Scienze Naturali, Torino, Italy
MSNC	Museo Civico di Storia Naturale, Carmagnola, Italy
MSNT	Museo Civico di Storia Naturale, Trieste, Italy
MSNV	Museo Civico di Storia Naturale, Venice, Italy
MZL	Museum of Zoology, Lund University, Lund, Sweden
MZSF	Museo Zoologico "La Specola", Florence, Italy
MZUB	Museo Zoologico dell'Università, Bologna, Italy
NCI	National Collection of Insects, Plant Protection Research Institute, Pretoria, South Africa
NHMB	Naturhistorisches Museum Basel, Switzerland
NHMS	Naturhistorische Museum, Szczecin (Stettin), Poland
NHRS	Naturhistoriska Rikmusset, Stockholm, Sweden
NMBSA	National Museum, Bloemfontein, South Africa

NMN National Museum, Nairobi, Kenya

PASW Polish Academy of Sciences, Warszawa, Poland

PSC Peter Schüle Collection, Düsseldorf, Germany

RNC Roger Naviaux Collection, Domérat, France

SAM South African Museum, Cape Town, South Africa

SBC Sandro Bruschi Collection, Rome, Italy

SMNS State Museum of Natural History, Stuttgart, Germany

SMUK Snow Entomological Museum, University of Kansas, USA

SMWN State Museum, Windhoek, Namibia

TMSA Transvaal Museum, Pretoria, South Africa

VAC Vincent Allard Collection, Waterloo, Belgium

VKC Vít Kabourek Collection, Zlín, Czech Republic

VTC Vladimír Tichy Collection, Trebon, Czech Republic

WDSC William D. Sumlin Collection, San Antonio, Texas, USA

ZMB Zoologische Museum, Berlin, Germany

ZMUC Zoologisk Museum, Copenhagen, Denmark

ZSM Zoologische Staatssammlung München, Germany

As far as possible, localities have been identified and located by a careful consultation of travel guides and maps. In particular, the following Lonely Planet Books have been consulted: East Africa, by G. Crowther & H. Finlay, 3rd edition (Italian translation: Kenya, Tanzania e Zanzibar, Guide EDT, 1994); Malawi, Mozambique & Zambia, by D. Else, August 1997; South Africa, Lesotho & Swaziland, by J. Murray et al., 3rd edition, January 1998; Zimbabwe, Botswana & Namibia, by D. Swaney, 3rd edition, January 1999. Moreover, the following maps have been duly examined (in alphabetical order): Africa, scale 1: 9,000,000, Hallwag, Bern 1980/81; Africa, Central and South, scale 1: 4,000,000, Michelin Map, Clermond-Ferrand 1971; Africa, North-East, scale 1: 4,000,000, Michelin Map, London 1973; Angola, scale 1: 2,000,000, Cartographia, Budapest 1989; Carta dell'Africa Orientale Italiana, scale 1: 1,000,000, in 37 sheets, TCI, Milano 1936; Carta dell'Africa Orientale Italiana, scale 1: 1,000,000, in 6 sheets, CTI, no date given (but 1938); Democratic Republic of the Congo, scale 1: 3,300,000, Cartographia, Budapest 1998; Ethiopia, Eritrea, Djiibouti, scale 1: 2,500,000, Cartographia, Budapest 1996; Kenya, 1: 1,250,000, Bartholomew World Travel Map, 1981; Kenya, scale: 1,500,000, Kenya Government 1989; Kenya & Northern Tanzania, scale 1: 1,400,000, Rowanya Enterprises, Nairobi, no date given; Kenya, Uganda, Tanzania, Ruanda, Burundi, scale 1: 2,000,000, Freytag & Berndt, Wien, no date given; Malawi, scale 1: 900,000, ITMB Publishing, Vancouver 1996; Mozambique, scale 1: 2,000,000, Cartographia, Budapest 1994/95; Südafrika, scale 1:2,000,000, Freytag & Berndt Maps, Wien 1996; Tanzania, scale 1: 1,500,000, Nelles Maps, München, no date given; Transvaal, scale 1: 1,500,000, Map Studio, Johannesburg 1989; Uganda, scale 1: 800,000, ITMB Publishing, Vancouver 1996; Zambia, 1: 1,500,000, ITMB Publishing, Vancouver 1997; Zimbabwe, scale 1: 1,250,000, ITMB Maps, Vancouver 1995; Zimbabwe, scale 1: 1,100,000, Freytag & Berndt Maps, Wien 1997; Zimbabwe, Botswana & Namibia, 1: 2,000,000, Lonely Planet Travel Atlas, January 1996. When neither maps nor guides could help, localities have been checked in the NIMA Geonet programme. However, several toponyms sorted out to be highly ambiguous, as many different localities may bear the very same name: for instance, "Elandshoek" (no less than 21 toponyms in Geonet, from South Africa),

Cassola Cassola

"Doornfontein" (66), "Rooipoort" (66), "Weltvreden" (213), "Rietfontein" (353). Localities which have remained unknown are listed within their respective countries, before the given provinces.

Distributional data have been ordered, as far as possible, in a West to East and North to South sequence, within the corresponding countries (underlined) and provinces (italics). Literature sources and depository collections are indicated. As far as possible, co-ordinates or location of listed toponyms, as well as the current names of old colonialistic localities, are also given.

The following abbreviations of protected areas have been used: FR (Forest Reserve), FS (Forest Station), GR (Game Reserve), MR (Mountain Reserve), NR (Nature Reserve), NP (National Park).

ABRUPTESCULPTA W. Horn, 1914

Dromica abrupte-sculpta W. Horn, 1914b: 423

Dromica abrupte-sculpta, XVIII. Gruppe "gibbicollis"; Horn 1926a: 95.

Dromica abruptesculpta; Wiesner 1992: 68, Werner 2000a: 186.

TYPE LOCALITY. "Kapiri".

Type specimens. 1 δ , 1 \circ (MRAC!); 2 \circ \circ (DEI!).

ILLUSTRATIONS. Habitus (Werner 2000a, colour figs 189, 189.1).

DISTRIBUTION. <u>D. R. Congo</u>. *Shaba*: Kapiri (Horn 1914b; Werner 2000a; DEI, MRAC); Mufungwa-Sampwe (Horn 1914b; DEI); Elisabethville [=Lubumbashi] (Horn 1929a; Burgeon 1937; Werner 2000a; MRAC); Mura (FCC).

REMARKS. My specimen from Mura (November 1949) should be the fifth known specimen, as the species has apparently never been collected again.

ABUKARI Cassola, 1989

Dromica abukari Cassola, 1989: 118.

Dromica abukari; Wiesner 1992: 63, Werner 2000a: 117.

Type locality. "Afgoi, 25 km W of Mogadishu".

Type specimens. Holotype \Im (FCC!); allotype \Im (GZC!); 2 \Im \Im , 1 \Im (FCC!); 1 \Im (MRAC!); 1 \Im (KWC!).

ILLUSTRATIONS. Habitus, labrum, aedeagus (Cassola 1989, fig. 1); habitus (Werner 2000a, colour fig. 86); aedeagus (Cassola, this paper, fig. 84); habitat (Cassola, this paper, colour fig. 135).

DISTRIBUTION. <u>Somalia</u>. *Benadir*: Afgoi (Cassola 1989; Cassola & Miskell 1990; Werner 2000a; FCC, GAC, GZC, MRAC, KWC); Mogadishu (Cassola 1989; FCC).

REMARKS. Eight specimens only are known so far in all.

ACUMINATA Chaudoir, 1864

Dromica acuminata Chaudoir, 1864: 40.

Dromica acuminata; Fleutiaux 1892: 35.

Dromica tuberculata var. acuminata; Péringuey 1893: 80.

Dromica tuberculata acuminata, III. Gruppe "bicostata-octocostata"; Horn 1926a: 85.

Dromica tuberculata acuminata; Wiesner 1992: 61, Werner 2000a: 102.

Junior synonym of *Pseudodromica tuberculata carinulata* (syn. n.).

TYPE LOCALITY. "Elle habite le Natal".

Type specimens. "...deux individus" (MNHN?).

ILLUSTRATIONS. Habitus (Werner 2000a, colour fig. 67c).

ALBICINCTELLA Bates, 1878

Dromica albicinctella Bates, 1878: 334.

Cosmema albicincta (sic!); Fleutiaux 1892: 37.

Cosmema albicinctella; Péringuey 1893: 89.

Dromica albicinctella, XII. Gruppe "furcata-alboclavata"; Horn 1926a: 92.

Dromica albicinctella; Wiesner 1992: 66, Werner 2000a: 156.

TYPE LOCALITY. "Trans-Vaal".

Type specimen. "3" (MNHN?).

ILLUSTRATIONS. Habitus (Werner 2000a, colour figs 137, 137.1); aedeagus (Cassola, this paper, fig. 69).

DISTRIBUTION. <u>South Africa</u>. Transvaal (Bates 1878). *North-West*: Potchefstroom (Werner 2000a; TMSA); Melodie [25°44S-22°51E] (DLPC); Swartruggens (FCC). *Gauteng*: 20 km E Pretoria (FCC, HFHC); Johannesburg (FCC, TMSA).

REMARKS. A distinct species in the *marginella* group, as important differences in elytral sculpture (Horn 1935a) are apparent (Bates 1878: "...punctis versus apicem rarioribus"). However, the whole group should definitely be deeply reviewed, based on examination of type specimens as well as of large, recent, well-labelled material.

ALBIVITTIS Chaudoir, 1865

Dromica albivittis Chaudoir, 1865: 48.

Dromica albivittis; Fleutiaux 1892: 35.

Dromica albivittis, III. Gruppe "bicostata-octocostata"; Horn 1926a: 85.

Dromica albivittis; Wiesner 1992: 61, Werner 2000a: 100.

Pseudodromica? albivittis (comb. n.).

Type locality. "... Elle habite Port-Natal et m'a été généreusement donnée par M. Grut".

Type specimen. "Mâle ..." (MNHN).

ILLUSTRATIONS. Habitus (Horn 1940, pl. 10, fig. 1; Werner 2000a, colour figs 65, 65.1, 65.2); aedeagus (Cassola, this paper, fig. 107).

DISTRIBUTION. <u>South Africa</u>. *Northern Province*: Woodbush Drive [23°52S-29°55E] (FCC, TMSA). *Mpumalanga*: Lydenburg (Péringuey 1893; TMSA); Barberton (Péringuey 1893; Werner 2000a); 30 km W Piet Retief (Werner 2000a; KWC). *KwaZulu/Natal*: Port Natal (Chaudoir 1865); Giants Castle [29°20S-29°29E] (TMSA).

Remarks. Chaudoir's species, despite its distinctive elytral markings, would appear to belong to the genus *Pseudodromica*, because specimens from Woodbush Drive, Northern Province, which would appear to be *albivittis* because of their distinctive elytral markings, have the same typically-shaped aedeagus as most other *Pseudodromica* species have. However, such a combination is proposed here tentatively only, because *albivittis* was actually described from "Port Natal", and a male specimen from Giants Castle, KwaZulu/Natal, in the TMSA collection, although very similar to the above mentioned specimens as far as body shape and elytral markings are concerned, proved to possess a

Cassola Cassola

much distinctive, completely different aedeagus (slender, longer, tapering, dorsally arched in its apical part, ending into a subrectangular, albard-shaped, apical beak: fig. 107), thus obviously being a distinct species, other than the one from Woodbush Drive. It is well possible that the latter species could instead be *bertinae* Dohrn, 1891 (described from "Transvaal") and, in such a case, *bertinae* should be resurrected from synonymy. However, any definite taxonomic statement would necessarily imply the check of all type specimens. If synonymy with *albivittis* should be confirmed, a second undescribed species would appear to be involved in.

ALBOCLAVATA Dokhtouroff, 1883

Dromica alboclavata Dokhtouroff, 1883: 8.

Cosmema alboclavata; Fleutiaux 1892: 37, Péringuey 1893: 89.

Dromica alboclavata, XII. Gruppe "furcata-alboclavata"; Horn 1926a: 92.

Dromica alboclavata; Wiesner 1992: 66, Werner 2000a: 155.

TYPE LOCALITY. "Patrie: Natal".

Type specimens. "2 exemplaires, ma collection": "DEI: 1 Syntypus" (Döbler 1973: 356).

ILLUSTRATIONS. Habitus (Werner 2000a, colour figs 135, 135.1, 135.2); left elytron (Horn 1940, pl. 18, fig. 11); aedeagus (Cassola, this paper, fig. 68).

DISTRIBUTION. <u>South Africa</u>. Rhen Kop (TMSA). *North-West*: Delarey (FCC, TMSA). *Northern Province*: Warmbaths (FCC); Warmbad (Werner 2000a; KWC); Pietersburg-Tzaneen (Werner 2000a; KWC); Zoutpansberg (TMSA); Waterberg (TMSA); Nylsvley [24°40S-28°42E] (TMSA). *Gauteng*: Johannesburg (FCC); Bedford Ridge nr Johannesburg (FCC, NCI); Pretoria (MRAC, NCI); 20-25 km E Pretoria (FCC). *KwaZulu/Natal*: "Natal" (Dokhtouroff 1883; MRAC); Durban (MRAC); Estcourt (TMSA); Weenen (MRAC).

REMARKS. A distinct species in the *marginella* group, as important differences in pronotal length (Dokhtouroff 1883: "Le thorax est presque quadrangulaire") and in elytral sculpture (Horn 1935a) are apparent. However, the whole group should be deeply reviewed, based on examination of type specimens as well as of large, recent, well-labelled material from many different localities.

ALBOCOSTATA W. Horn, 1939

Dromica (Myrmecoptera) Mauchi subsp. albo-costata Horn, 1939: 152.

Dromica mauchii albocostata; Wiesner 1992: 63, Werner 2000: 114.

Pseudodromica mauchii albocostata (comb. n.).

TYPE LOCALITY. "Kitui, collected by R. Toker".

Type specimens. 1 δ (DEI!); 1 \circ (NMN!).

ILLUSTRATIONS. Habitus (Werner 2000a, colour figs 82c, 82c.1).

ALGOENSIS Péringuey, 1893

Myrmecoptera algoensis Péringuey, 1893: 67.

"eine Zeichnungsvarietät von Myrm. Junodi"; Horn 1904a: 91.

Compl-F of Dromica Junodi, VIII. Gruppe "Saundersi-Junodi"; Horn 1926a: 90.

Junior synonym of Dromica junodi; Wiesner 1992: 64, Werner 2000a: 143.

Type locality. "From Rikatla (Delagoa Bay)".

Type specimen. Holotype ? (SAM).

ALLARDI Basilewsky, 1963

Dromica allardi Basilewsky, 1963: 99.

Dromica allardi; Wiesner 1992, 68, Werner 2000a: 186.

Type locality. "Katanga: Kolwezi".

Type specimens. Holotype \Im (MRAC!); allotype \Im (MRAC!); $\Im \Im \Im$, $9 \Im \Im$ (MRAC!).

ILLUSTRATIONS. Habitus (Basilewsky 1963, fig. 1; Werner 2000a, colour figs 190, 190.1).

DISTRIBUTION. <u>D. R. Congo</u>. *Shaba*: Kolwezi (Basilewsky 1963; Werner 2000a; FCC, MRAC); Zilo (Basilewsky 1963; ABC, FCC, MRAC); Jadotville [=Likasi] (Basilewsky 1963; Werner 2000a; MRAC); Mura (Basilewsky 1963; MRAC); Lualaba: Musonoie (FCC, MRAC, TMSA).

ALLARDIANA Basilewsky, 1972

Dromica allardiana Basilewsky, 1972: 275.

Dromica allardiana; Wiesner 1992: 65, Werner 2000a: 152.

Type locality. "Katanga, Zilo".

Type specimens. Four specimens: holotype \Im (MRAC!); $2 \Im \Im$, $1 \Im$ (MRAC!).

ILLUSTRATIONS. Habitus (Werner 2000a, colour figs 130, 130.1).

DISTRIBUTION. <u>D. R. Congo</u>. *Shaba*: Zilo (Basilewsky 1972; Werner 2000a; ABC, JWC, MRAC, VAC); Kanzenze (FCC).

REMARKS. The taxonomic place of this species is still unclear. Together with two closely allied species, "Cicindela" cosmemoides W. Horn, 1913, and hexasticta Fairmaire, 1887, it should probably be isolated in a separate genus, other than Dromica and Bennigsenium.

AMBITIOSA Péringuey, 1893

Cosmema ambitiosa Péringuey, 1893: 84.

Dromica ambitiosa, XVI. Gruppe "sexmaculata-Helleri"; Horn 1926a: 95.

Dromica ambitiosa; Wiesner 1992: 68, Werner 2000a: 183.

Type locality. "Transvaal (Barberton)".

Type specimen. "I only know the male (one example)" (DEI!).

ILLUSTRATIONS. Habitus (Werner 2000a, colour figs 184, 184.1); aedeagus (Cassola et al. 2000, fig. 3e; Cassola, this paper, fig. 38); habitat (Werner 2000a, fig. 184.2; Cassola, this paper, fig. 139).

DISTRIBUTION. <u>South Africa</u>. *Mpumalanga*: Lydenburg (FCC, TMSA); Marieps Mts. (FCC, TMSA); Witbank (FCC); White River (TMSA); 20 km E Nelspruit (PSC); Ermelo (TMSA); Crocodile Poort (TMSA); Barberton (Péringuey 1893, Werner 2000a; BMNH, BVNC, DEI, FCC, KWC, NCI, PSC, TMSA); 8 km SE Barberton on Bulembu rd (FCC, KWC, PSC); Three Sisters [20 km SW Kaapmuiden] (FCC, TMSA). *Gauteng*: Pretoria (FCC). *KwaZulu/Natal*: 20 km E Magudu (FCC); Mkuzi (TMSA); Ndumu (VTC). <u>Swaziland</u>. Malolotja NR (FCC, KWC, PSC).

REMARKS. The geographical distributions of *ambitiosa* and allied species have been recently determined by Cassola *et al.* (2000).

ANGOLANA Cassola, 1980

Dromica angolana Cassola, 1980: 204.

Dromica angolana; Wiesner 1992: 67, Werner 2000: 176.

Type locality. "S.-E. Angola: Cuchi, Menongue".

Cassola Cassola

Type specimens. Holotype \Im (CAS!); allotype \Im (CAS!); 1 \Im (FCC!).

ILLUSTRATIONS. Habitus, labrum, aedeagus (Cassola 1980a, fig. 1); habitus (Werner 2000a, colour fig. 167).

DISTRIBUTION. <u>Angola</u>. *Cuando Cubango*: Menongue (Cassola 1980a; CAS); Cuchi nr Menongue, within 100 km N (Cassola 1980a; Werner 2000a; CAS, FCC).

REMARKS. Just the four type specimens are known so far.

ANGUSTATA W. Horn, 1909

Dromica (Myrmecoptera) Bennigseni angustata Horn, 1909a: 92.

Dromica Bennigseni angustata, V. Gruppe "Bennigseni-egregia"; Horn 1926a: 88.

Dromica bennigseni angustata; Wiesner 1992: 63, Werner 2000a: 124.

Type locality. "Lindi (Süden von Deutsch-Ostafrika)".

Type specimens. Number not given, but both sexes included; 5 syntypes (DEI!).

ILLUSTRATIONS. Habitus (Werner 2000a, colour figs 93a, 93a.1).

Remarks. Subspecific status appears to be doubtful. Probably just a junior synonym of bennigseni.

ANGUSTICOLLIS Péringuey, 1894

Myrmecoptera angusticollis Péringuey, 1894: 448.

Dromica angusticollis, XV. Gruppe "angusticollis"; Horn 1926a: 93.

Dromica angusticollis; Wiesner 1992: 66, Werner 2000a: 163.

Type locality. "Mashunaland (Salisbury)".

Type specimens. Number not given, but both sexes included: 2 3 3 (SAM); 1 3 (DEI!).

ILLUSTRATIONS. Habitus (Werner 2000a, colour figs 145, 145.1, 145.2); aedeagus (Cassola, this paper, fig. 55).

DISTRIBUTION. Malawi. Central: Chikale FR [Nkatha Bay] (Werner & Dudley 1998); Dzalanyama FR [SW of Lilongwe] (Werner & Dudley 1998). Southern: Mulanje (MRAC). Zimbabwe. Mashonaland East: Salisbury [=Harare] (Péringuey 1894, 1896; Werner 2000a; DEI, MRAC, NCI, TMSA). Matabeleland South: Matobo [=Matopos] (FCC); S of Marula nr Nkukhu (FCC). Masvingo: Mushandike NP (Werner 2000a). Mozambique. Sofala: 6fi mi Beira (FCC, NCI).

ANTONIAE Werner, 1998

Dromica antoniae Werner, 1998: 166.

Type locality. "Morogoro, near Mikumi".

Type specimens. Holotype ♂ (TMSA); "some paratypes" (KWC).

ILLUSTRATIONS. Habitus, labrum, aedeagus (Werner 1998, figs 1-3); habitus (Werner 2000a, colour figs 102, 102.1); habitat (Werner 2000a, fig. 102.2).

DISTRIBUTION. Tanzania. Morogoro: Mikumi (Werner 1998, 2000a).

REMARKS. Six specimens in all $(4 \ 3 \ 3, 2 \ 9)$ are known so far (Werner 1998).

APICALIS W. Horn, 1903

Dromica (Cosmema) apicalis Horn, 1903a: 317.

Dromica apicalis, XIV. Gruppe "lepida"; Horn 1926a: 93.

Dromica apicalis; Wiesner 1992: 66, Werner 2000a: 160.

Type locality. "Salisbury (Mashonaland)".

Type specimens. Number not given, but both sexes included: $1 \ 3, 4 \ 9 \ (DEI!)$.

ILLUSTRATIONS. Habitus (Werner & Wiesner 1994, fig. 25; Werner 2000a, colour fig. 141); left elytron (Horn 1940, pl. 19, fig. 8); aedeagus (Cassola, this paper, fig. 44).

DISTRIBUTION. Namibia. Khomas: Windhoek: Excelsior [22°27S-17°38E] (Werner & Wiesner 1994; FCC, SMWN). Botswana. East: 110 km S Francistown (TMSA). Zimbabwe. Mashonaland East: Salisbury [=Harare] (Horn 1903a; DEI, FCC, NCI, TMSA). Manicaland: Umtali [=Mutare] (Werner 2000a; DEI). Matabeleland South: Plumtree (DEI); Bulawayo (DEI, FCC); 35 km SE Gwanda [21°01S-29°17E] (DWBC). South Africa. Free State: Demetsdorp (TMSA). Gauteng: Johannesburg (TMSA); 12 mi E Pretoria (TMSA). Northern Province: 2 km S Pietersburg (PSC); Blouberg MR (PSC). Mpumalanga: Groenfontein [25°25S-29°20E] (NCI). KwaZulu/Natal: Empandeni (NCI).

ARMIGERA Chaudoir, in Dokhtouroff, 1883: 8.

Nomen nudum.

Junior synonym of Cosmema alboclavata; Fleutiaux 1892: 37.

Junior synonym of Cosmema furcata; Horn 1897d: 62.

Junior synonym of Dromica furcata; Horn 1926a: 92, Wiesner 1992: 65, Werner 2000a: 153...

Type Locality. Kuriman (Döbler 1973: 359).

Type specimens. "1 Syntypus" (DEI).

REMARKS. Synonymy with *D. furcata* was established by Horn (1897d: "*Cosmema armigera* D. ist das 3 von *C. furcata* Boh.").

ASPERA Chaudoir, in Dokhtouroff, 1883: 8.

Nomen nudum.

Junior synonym of Cosmema alboclavata; Fleutiaux 1892: 37.

Dromica aspera Dokhtouroff; Horn 1926a: 91, Wiesner 1992: 65, Werner 2000a: 151.

Type locality. "Cap. bon. spei" (Döbler 1973: 359).

Type specimens. 1 "Syntypus" ♀ (DEI!).

ILLUSTRATIONS. Habitus (Wer ner & Wiesner 1994, fig. 23; Werner 2000a, colour figs 129.1, 129.2, 129.3, 129.4); left elytron (Horn 1940, pl. 18, fig. 6); aedeagus (Cassola, this paper, fig. 66).

DISTRIBUTION. Namibia. Omaheke: Gobabis: Ulthoy [22°52S-19°46E] (SMWN); Gobabis: Oestenwald [21°52S-19°58E] (FCC, SMWN); Gobabis: Eava [22°96S-18°56E] (SMWN). Okavango: Khaudom GR [18°29S-20°56E] (Werner & Wiesner 1994; SMWN). Otjozondjupa: Hereroland-West [20°31S-17°29E] (Werner 2000a; JWC). Botswana. East: Palapye (TMSA). Zimbabwe. Manicaland: Umtali [=Mutare] (TMSA). Matabeleland South: 20 km W Gwanda (Werner 2000a; KWC). South Africa. Cape Province (Werner 2000; DEI). Northern Cape: Kimberley (Péringuey 1893, sub Cosmema lateralis: see Horn 1897d). Free State: Orange Free State (Werner 2000a; MRAC).

Remarks. A puzzling misinterpreted species, just mentioned by Dokhtouroff (1883), as referred to Chaudoir i.l., while describing *alboclavata*. The insect that Péringuey (1896) later considered to be *aspera* was in reality a form of *coarctata* (Werner 1999), and moreover both *granulata* Dohtouroff, 1883, and *foveolata* Péringuey, 1888, which have been considered to be synonymous with *aspera* (Wiesner 1992), are in my own opinion distinct full species. So none of these names appears to be

Cassola Cassola

available for designating the species named *aspera* by Chaudoir (i.l.) and Dokhtouroff (nomen nudum). Examination of a so-called "syntype" (a female specimen labelled "Cap bon. Spei") and a male specimen labelled "ex cab. Schaum, coll. V. de Poll", in DEI collection, showed *aspera* to be a valid species, still in need to be described. On the contrary, Péringuey's (1898) statement, that because the species he had called *lateralis* had turned out to be "identical with Chaud. type bearing the unpublished name of *C. aspera*" (Horn 1897d) it should be named *aspera* Pér., would seem to be incorrect.

ASPERA Péringuey, 1896

Cosmema aspera Péringuey, 1896: 111.

Dromica coarctata aspera, XIII. Gruppe "coarctata"; Horn 1926a: 93.

Dromica coarctata var. aspera; Horn 1940: 275.

Dromica coarctata aspera; Wiesner 1992: 66 ("neuer Name erforderlich").

Dromica coarctata kehmiini; Werner 1999: 16 (substitution name), Werner 2000a: 158.

Type locality. "Cape Colony (Graaf-Reinet)".

Type specimens. $1 \$ (SAM).

ILLUSTRATIONS. Left elytron (Horn 1940, pl. 19, fig. 5).

AUROPUNCTATA Quedenfeldt, 1883

Dromica (Cosmema) auropunctata Quedenfeldt, 1883: 249.

Cosmema auropunctata; Fleutiaux 1892: 37, Horn 1908a: 31.

Dromica auropunctata, XV. Gruppe "transitoria-auropunctata-elegantula"; Horn 1926a: 94.

Dromica auropunctata; Wiesner 1992: 67, Werner 2000a: 174.

Foveodromica auropunctata (comb. n.).

Type locality. "Malange".

Type specimen. "Nur ein ♀" (ZMB?).

ILLUSTRATIONS. Habitus (Werner 2000a, colour fig. 163); left elytron (Horn 1940, pl. 18, fig. 13); aedeagus (Cassola, this paper, fig. 114).

DISTRIBUTION. <u>Angola</u>. Chiyaka (Wellman & Horn 1908). Chipeyo (Wellman & Horn 1908). *Benguela*: Benguela (Ferreira 1965). *Malanje*: Malanje (Quedenfeldt 1883; Ferreira 1965). *Bié*: "Plateau/von Bihé; coll. Ehlers/V.de Poll" (DEI). *Huila*: Tchivinguire (Werner 2000a; FCC); Bimbi [=Bimbe?] (Horn 1935b; Ferreira 1965).

BASILEWSKYI Cassola, 1978

Dromica basilewskyi Cassola, 1978a: 88.

Dromica basilewskyi; Wiesner 1992: 63.

Junior synonym of *Bennigsenium insperatum* Kolbe, 1915; Cassola in Werner 1993b: 16; Werner 2000b: 20.

Type locality. "Ethiopia, Sidamo prov.: 40 km SW of Dua Parma River 1050 m".

Type specimens. Holotype \Im (MRAC!); allotype \Im (MRAC!); 1 \Im (FCC!).

ILLUSTRATIONS. Habitus, labrum, aedeagus (Cassola 1978a, p. 89, fig. 7).

BATESI W. Horn, 1900

Myrmecoptera Batesi Horn, 1900b: 363.

Dromica Batesi, V. Gruppe "Bennigseni-egregia"; Horn 1926a: 89.

Dromica batesi; Wiesner 1992: 64, Werner 2000a: 136.

Type locality. "Stony Athi (Africa orient. Britann.- Le Gros collegit)".

Type specimen. "1 ♂" (DEI!; Döbler 1973: "Syntypus").

ILLUSTRATIONS. Habitus (Werner 2000a, colour figs 104, 104.1); aedeagus (Cassola, this paper, fig. 60).

DISTRIBUTION. Kenya. Rift Valley: Naivasha (NMN). Nairobi: Stony Athi (Horn 1900a; Werner 1993a; BMNH, DEI). Eastern: Kibwezi [Nairobi-Mombasa rd] (DEI, FCC); Kiboko (FCC). Coast: Mwalewa Forest nr Lunga-Lunga (FCC, NMN); Shimba Hills (JWC); lower Tana-Sabaki (DEI). Tanzania. "Trockenwald" nr. Mtotohovu (Horn 1921; DEI); Kwakiyembe (DEI). Mara: Longido (Basilewsky 1962a; Werner 2000a; MRAC). Arusha: Meru-Niederung: Ngare na nynki (Horn 1910a; DEI, MRAC). Kilimanjaro: Moshi (Basilewsky 1962a; MRAC); Kilimandjaro: lower zone (Horn 1910a; DEI, FCC, MRAC); Same (Werner 2000a). Tanga: Usambara (Horn 1910a; DEI, MRAC); Usambara: Neu Bethel (DEI, KWC) Handeni: Makinda (FCC, VTC). Tabora: Kilulu [Kululu?: 6°31S-33°04E] (DEI).

Remarks. The smaller size and the finer pronotal sculpture easily distinguish *batesi* from *schaumi*. However, the whole *batesi-schaumi-egregia* group, with all related species, should be deeply reviewed.

BENNIGSENI W. Horn, 1896

Myrmecoptera Bennigseni Horn, 1896a: 58.

Dromica Bennigseni, V. Gruppe "Bennigseni-egregia"; Horn 1926a: 88.

Dromica bennigseni; Wiesner 1992: 63, Werner 2000a: 123.

Type locality. "Ost-Afrika ...".

Type specimen. "1 $\$ " (DEI!); 1 $\$ 3, "Syntypus" (?) (DEI!).

ILLUSTRATIONS. Habitus (Horn 1910b, pl. 10, fig. 11; Werner 2000a, colour figs 93.1, 93a, 93a.1); left elytron (Horn 1940, pl. 17, fig. 6); aedeagus (Cassola, this paper, fig. 87).

DISTRIBUTION. <u>Tanzania</u>. "Deutsch-Ost Afrika" (Horn 1896a; DEI). *Lindi*: Lindi (Horn 1909a, ssp. *angustata*; Werner 2000a; MRAC). <u>Malawi</u>. *Central*: Dzalanyama FR [SW of Lilongwe] (Werner & Dudley 1998); Dedza FR (Werner & Dudley 1998). *South*: Zomba FR (Werner & Dudley 1998); Malosa Mt. (Werner & Dudley 1998).

Remarks. Slightly dilated instead of filiform antennae would separe this species from the closely allied *peringueyi*. Male aedeagi are almost identical in both species. However, too few specimens are known so far. The supposed ssp. *crassereducta* is herein considered to deserve a full specific status.

BERTINAE W. Horn, 1926

Dromica albivittis Bertinaae Horn, 1926a: 85.

Incorrect subsequent emendation, pro bertinae Dohrn, 1891.

BERTINAE C. A. Dohrn, 1891

Dromica Bertinae Dohrn, 1891: 384.

Junior synonym of Cosmema albivittis?; Péringuey 1893: 96.

CASSOLA

Junior synonym of *Dromica albivittis*; Horn 1896d: 168, Horn 1926a: 85, Basilewsky 1957: 470, Wiesner 1992: 61, Werner 2000a: 100.

Junior synonym of *Pseudodromica albivittis*? (comb. n.).

TYPE LOCALITY. "Transvaal".

Type specimen. Holotype & (PASW? NHMS?).

REMARKS. Synonymy with *albivittis* is taken here under all reservations, as two much different species appear to be involved under *albivittis*, and *bertinae* could well prove to be the second species. See discussion above (under *albivittis*).

BERTOLONII Thomson, 1856

Myrmecoptera Bertolonii Thomson, 1856: 482.

Myrmecoptera Bertolonii; Fleutiaux 1892: 35.

Dromica Bertolonii, IV. Gruppe "clathrata-Mauchi", Untergruppe "Bertolonii-nobilitata"; Horn 1926a: 88.

Dromica bertolonii; Wiesner 1992: 63, Werner 2000a: 118.

Type locality. "Mozambique".

Type specimens. "Cinq individus" (MNHN? BMNH?).

ILLUSTRATIONS. Habitus (Bertoloni 1858, fig. 2, *D. rugosa*; Werner 2000a, colour figs 87.1, 87.2); left elytron (Horn 1940, pl. 22, fig. 8); aedeagus (Cassola, this paper, fig. 96).

DISTRIBUTION. <u>South Africa</u>. *Northern*: Shilouvane (MRAC, NCI); Kruger NP (MRAC). <u>Mozambique</u>. Mozambique (DEI). *Gaza*: Gazaland (Werner 2000a; TMSA). *Inhambane*: "In ripis fluminis Magnárra" (Bertoloni 1858, sub *D. rugosa*); Leonzwane [23°24S-35°06E] (FCC, MSNC); Nhambuica (DEI, FCC). *Maputo*: Massinga [26°11S-32°19E] (MSNC); Tembé (Junod 1899); Antioka (Junod 1899). *Nampula*: Mokambo Bay (DEI); Moçambique (Thomson 1856).

REMARKS. Werner (2000, fig. 87.2) quotes a male specimen in DEI, labelled "Mok...", as the species' type specimen. However, Thomson's original type specimen should be in the MNHN collection (Horn & Kahle 1935-37), and moreover the DEI specimen was not considered by Döbler (1973) as a type specimen. Such a specimen, instead, is the type specimen of *rugosa* (see below).

BERTOLONII Péringuey, 1893

"Myrmecoptera Bertolonii Thoms.": Péringuey, 1893: 68.

Junior synonym of Dromica Bertolonii fossulata; Horn 1926a: 88, Basilewsky 1953: 191.

Junior synonym of Dromica bertolonii fossulata; Wiesner 1992: 63.

Dromica bertolonii bertolonii; Werner 2000a: 118.

BICOSTATA W. Horn, 1914

Dromica bicostata Horn, 1914a: 8.

Dromica bicostata, III. Gruppe "bicostata-octocostata"; Horn 1926a: 85.

Dromica bicostata; Wiesner 1992: 61, Werner 2000a: 100.

Pseudodromica? bicostata (comb. n.).

Type locality. "Süd-Angola (Ertl)".

Type specimen. "1 ♂" (DEI!).

ILLUSTRATIONS. Habitus (Horn 1940, pl. 9, fig. 2; Werner 2000a, colour fig. 66); aedeagus (Cassola,

this paper, fig. 108).

DISTRIBUTION. <u>Angola</u>. *Cunene*?: "Süd-Angola" (Horn 1914a; DEI); "Sul da Província de Angola" (Ferreira 1965).

REMARKS. The single holotype specimen only is known so far (Cassola 1980a). Attribution of *bicostata* to the genus *Pseudodromica* is here proposed tentatively only as the shape of aedeagus would seem to place it in a different group

BICOSTULATA W. Horn, 1914

Dromica bicostulata Horn, 1914a: 9.

Dromica bicostulata, II. Gruppe "tricostata"; Horn 1926a: 85.

Dromica bicostulata; Wiesner 1992: 61, Werner 2000a: 99.

Type locality. "Bailundo (Angola: Ertl)".

Type specimen. "1 ♀" (DEI!).

ILLUSTRATIONS. Habitus (Horn 1940, pl. 14, fig. 1; Werner 2000a, colour fig. 64).

DISTRIBUTION. Angola. Huambo: Bailundo (Horn 1914a; Ferreira 1965; DEI).

Remarks. The single holotype female specimen only is known so far (Cassola 1980a).

BILUNATA C. H. Dohrn, 1883

Dromica (Myrmecoptera) bilunata Dohrn, 1883: 278.

Myrmecoptera bilunulata (sic!); Fleutiaux 1892: 36.

Myrmecoptera bi-lunata; Péringuey 1893: 66.

Dromica bilunata, VI. Gruppe "bilunata"; Horn 1926a: 89.

Dromica bilunata; Basilewsky 1957: 473, Wiesner 1992: 64, Werner 2000a: 137.

TYPE LOCALITY. "Zambese".

Type specimens. Number and depository unknown (not in PASW; NHMS?).

ILLUSTRATIONS. Habitus (Werner 2000a, colour figs 107, 107.1); aedeagus (Cassola, this paper, fig. 91). DISTRIBUTION. Zimbabwe. "Country between Limpopo and Zambeze...Zambeze River" (Péringuey 1893); Lomagundi (MRAC). *Mashonaland West*: Kariba (TMSA). *Mashonaland Central*: Muurwi (Werner 2000a; KWC). *Mashonaland East*: Salisbury [=Harare] (FCC, MRAC, NCI, TMSA). *Midlands*: Chivhu: The Range (FCC, KWC); Gweru: Nalatale Ruins (FCC). *Manicaland*: N Rusape (FCC, JWC, KWC); Mutare nr Dorowa (FCC).

REMARKS. Horn (1903a) described a ssp. *prolongata* from "Gazaland" (Zimbabwe?), based on specimens collected by G.A.K. Marshall on the Inyanyadzi River. However, the much longer, straighter male aedeagus, as well as the longer apical part of the elytra behind the discal spot, clearly indicate *prolongata* to be a distinct species, other than *bilunata*, and moreover belonging to a different species group (see below).

BISBICARINATA Chaudoir, 1864

Dromica bis-bicarinata Chaudoir, 1864: 10.

Dromica bisbicarinata; Fleutiaux 1892: 34.

Junior synonym of *Dromica sculpturata*; Péringuey 1893: 76.

Junior synonym of *Dromica clathrata sculpturata*; Horn 1926a: 86, Wiesner 1992: 62, Werner 2000a: 106.

Cassola Cassola

Junior synonym of *Pseudodromica sculpturata* (comb. n.).

Type locality. "Du territoire des Zoulous".

Type specimens. Number not given ("les deux sexes") (MNHN).

BORANA Cassola, 1978

Dromica borana Cassola, 1978a: 91.

Dromica borana; Wiesner 1992: 64, Werner 2000a: 128.

Type locality. "Sidamo Prov.: 30 km NE of Yavello, 1600-1800 m".

Type specimen. "1 ♀" (MRAC!).

ILLUSTRATIONS. Habitus (Cassola 1978a, fig. 8; Werner 2000a, fig. 96, colour picture of holotype).

DISTRIBUTION. Ethiopia. Sidamo: 30 km NE Yavello (Cassola 1978a; Werner 2000a; MRAC).

REMARKS. Werner (1993b) described a ssp. *oesterlei* from another south Ethiopian locality (Arba Minch). However, by reason of its differently shaped, non-dilated antennae, I provisorily consider *oesterlei* to be a distinct species, other than *borana*. The whole *batesi-schaumi-egregia* group, with all related species, would need to be deeply reviewed.

BOUVIERI Babault, 1921

Myrmecoptera Bouvieri Babault, 1921: 13.

Cicindela bouvieri; Horn 1926a: 155.

?Euryarthron bouvieri; Wiesner 1992: 60.

Euryarthron bouvieri; Cassola in Werner 1993a: 58, Werner 2000a: 95.

Type Locality. "Thika River (British East Africa)".

Type specimen. 1 $\c 9$ (MNHN).

ILLUSTRATIONS. Habitus (Babault 1921, fig. 5; Werner 2000a, fig. 56, colour picture of holotype).

BREVINUDA W. Horn, 1907

Dromica (Myrm.) tarsalis brevinuda Horn, 1907: 332.

Junior synonym of *Dromica egregia tarsalis*; Horn 1926a: 88, Wiesner 1992: 63, Werner 2000a: 125.

Type locality. "Kigonsera (D.O. Afrika ...)".

Type specimens. Number not given, but both sexes included: 1 "Syntypus" (DEI: Döbler 1973).

BREVIPENNIS Péringuey, 1893

Cosmema brevipennis Péringuey, 1893: 87.

Junior synonym of Cosmema elegantula; Péringuey 1896: 112.

Junior synonym of Dromica elegantula; Horn 1926a: 94, Wiesner 1992: 68, Werner 2000a: 179.

Type Locality. "Natal (Pietermaritzburg)".

Type specimens. Some "syntypes" in SAM, with different label locality: "Natal, Malvern" (Cochrane 1995: 257).

BRZOSKAI Cassola, this paper

Dromica brzoskai Cassola, this paper.

Type Locality. "South Africa (Northern Province): 34 km E Tshipise".

Type specimens. Holotype \Im (SMUK!); allotype \Im (DWBC!); 1 \Im , 2 \Im (DWBC!); 1 \Im (FCC!);

1 ♀ (FCC!).

ILLUSTRATIONS. Habitus, labrum, aedeagus, elytra (Cassola, this paper, figs 129-133)
DISTRIBUTION. <u>South Africa</u>. *Northern Province*: env. of Tshipise (34 & 46.3 km E) (DWBC, FCC, SMUK); Messina NR (PSC, TMSA).

CARINULATA Chaudoir, 1860

Dromica carinulata Chaudoir, 1860: 306.

Dromica carinulata; Chaudoir 1864: 39, Fleutiaux 1892: 34.

Dromica tuberculata var. carinulata; Péringuey 1893: 78.

Dromica tuberculata carinulata, III. Gruppe "bicostata-octocostata"; Horn 1926a: 85.

Dromica tuberculata var. carinulata; Horn 1940: 276.

Dromica tuberculata carinulata; Wiesner 1992: 61, Werner 2000a: 101.

Pseudodromica tuberculata carinulata (comb. n.).

Type locality. "Habitat ad Portum Natalensem".

Type specimen. "Je ne connaissais alors que le mâle" (Chaudoir 1864). MNHN?

ILLUSTRATIONS. Habitus (Werner 2000a, colour figs 67a, 67a.1, 67a.2); left elytron (Horn 1940, pl. 21, fig. 2),

REMARKS. Until better information on the species' geographical variability will be available, I consider here *acuminata* and *immaculata* to merely be individual variations of *carinulata*, with no subspecific importance.

CITREOGUTTATA Chaudoir, 1864

Dromica (Cosmema) citreoguttata Chaudoir, 1864: 41.

Cosmema citreoguttata; Fleutiaux 1892: 36.

Cosmema citreo-guttata; Péringuey 1893: 85.

Dromica citreoguttata, XVI. Gruppe "sexmaculata-Helleri"; Horn 1926a: 95.

Dromica citreoguttata; Wiesner 1992: 68, Werner 2000a: 183.

Type locality. "... du pays des Zoulous".

Type specimens: "trois individus..." (MNHN).

ILLUSTRATIONS. Habitus (Péringuey 1893, pl. 2, fig. 6, sub *sexmaculata*; Werner 2000a, colour figs 185, 185.1, 185.2); left elytron (Horn 1940, pl. 18, fig. 17; pl. 23, fig. 7, sub "var. *sexmaculata* Pér."); aedeagus (Cassola, this paper, fig. 36); habitat (Cassola, this paper, fig. 139).

DISTRIBUTION. South Africa. "Transvaal" (DEI). Swandini NR (ACBRI). Elandshoek (NCI). North-West: Potchefstroom (Péringuey 1893, sub Cosmema sexmaculata Chd.; DEI). Northern Province: Tzaneen (TMSA); 15 km E Klaserie: Guernsey Farm (HFHC); Kruger NP: Pafuri (HFHC). Mpumalanga: Lydenburg (Péringuey 1893, sub Cosmema sexmaculata Chd.); Waterval Boven: Elands River (FCC); De Kuilen [25°10S-30°32E] (NCI); Berlin Gorge [25°32S-30°44E] (TMSA); Barberton (Werner 2000a; DEI, NCI, MRAC, TMSA); 8 km SE Barberton on Bulembu rd (FCC, KWC, PSC); Three Sisters [20 km SW Kaapmuiden] (Werner 2000a; DEI, FCC, TMSA); Kaapmuiden (HFHC); 5 km E Jambila [25°48S-30°53E] (FCC, TMSA); Marieps Mtn., Mariepskop (TMSA); White River: Lichtfontein Farm (FCC, TMSA); Nelshoogte: Knuckles grassland [25°47S-30°49E] (FCC); Uitsoek [25°15S-30°34E] (FCC, TMSA); Badplaas [26°08S-30°38E] (FCC, MCZR); Mariepskop: Welgevonden Forest [24°52S-30°34E] (FCC, NCI). KwaZulu/Natal: Zululand

(Chaudoir 1864); Estcourt (Péringuey 1896; FCC, NCI); Tugela River (Péringuey 1896); Tugela Ferry (TMSA). Mozambique. *Maputo*: Delagoa Bay [=Maputo] (Péringuey 1893, sub *Cosmema sexmaculata* Chd.).

REMARKS. The geographical distributions of *citreoguttata* and allied species have been recently determined by Cassola et al. (2000).

CLATHRATA Klug, 1834

Dromica clathrata Klug, 1834: 40.

Dromica clathrata; Fleutiaux 1892: 34.

Dromica clathrata, IV. Gruppe "clathrata-Mauchii"; Horn 1926a: 86.

Dromica clathrata; Wiesner 1992: 62, Werner 2000a: 105.

Pseudodromica clathrata (comb. n.)

Type-species of the genus Pseudodromica nov..

Type locality. "...in Süd-Afrika zu Hause".

Type specimens. "Beide Geschlechter" (ZMB?).

ILLUSTRATIONS. Habitus (Werner 2000a, colour figs 73, 73.1, 73.2); left elytron (Horn 1940, pl. 21, figs 4, 5); aedeagus (Cassola, this paper, fig. 115); larva (Arndt 1998, figs 13, 14, 15); habitat (Cassola, this paper, fig. 139).

DISTRIBUTION. "Afrique int. S.E." (MRSN). Botswana: "Bechuanaland" (MRAC); Lake N'Gami (Péringuey 1893). South Africa. Weyneck (TMSA). Rooipoort (TMSA). Rooiplat (TMSA). Bedford Ridge (TMSA). "Zusterstr." (TMSA). Northern Cape: Rietfontein (TMSA). Free State: Ventersburg (TMSA); Bothaville (TMSA); Demetsdorp (TMSA); Boshof (NMBSA); 10 km N Viljoenskroon (FCC); Linokana (JPC, IWC, KWC); Sand River Mt. [24°32S-27°39E] (DLPC); Christiana (Wallengren 1881; MRAC); Krugersdrifdam (HFHC); Reddersburg (TMSA). North-West: Potchefstroom (Péringuey 1893); De la Rey (TMSA); Klerksdorp (Péringuey 1893); Pilanesberg [25°15S-27°13E] (EAC); Rustenburg (Horn 1907; BMNH, MRAC); Lichtenburg (TMSA); Schoemansville [25°46S-27°53E] (FCC, TMSA); "Buffelsh." [probably Buffelspoort, 25°48S-27°29E] (TMSA). Gauteng: Johannesburg (FCC, TMSA); Boksburg (Péringuey 1893); Pretoria (BMNH, FCC, TMSA); Rosslyn [suburb of Pretoria] (TMSA); Walhalla [=Valhalla, suburb of Pretoria?] (TMSA); Muldersdrift [nr Johannesburg, 26°05S-27°55E] (TMSA); Saltpan [nr Pretoria?, 25°30S-28°15E] (MRAC).. Northern Province: Haenertsburg (Horn 1907); near Warmbath (KWC); Warmbaths (FCC); Zoutpan (FCC); Pienars (FCC); Waterberg (Wallengren 1881); Thabazimbi (Werner 2000a; KWC); Chilovane (TMSA); Pienaars River (TMSA); Pietersburg (TMSA); Zoutpan (TMSA). Mpumalanga: Lydenburg (FCC, TMSA); Lydenburg: 10 km to Ohrigstad (KWC); Barberton (BMNH, FCC, KWC, PSC); Griffin Mine [nr Leydsdorp, 23°59S-30°31E] (TMSA); Waterval (TMSA; Horn 1907); Ermelo (TMSA). KwaZulu/Natal: "Natal" (MRAC); Elandskraal (TMSA); Port Natal (Brême 1844, sub D. gigantea). Lesotho: Basutoland: Mamates (Werner 2000a; MRAC); Malealea: Makhaleng River (Wiesner 2001). Mozambique. "Mozambique" (JWC). Maputo: Delagoa Bay [=Maputo] (Péringuey 1893).

REMARKS. Re-described by Boheman (1848). Relationship with *sculpturata* was discussed by Horn (1907). Larger size, different elytral sculpture, and enlarged vs. filiform antennae, would suggest specific separation. Moreover, the labrum of *clathrata* males is black with a yellow longitudinal stripe. Synonymy of *gigantea* is given here below just based on Horn's authority (1910b, 1926a), but it has to be recalled that Chaudoir (1864) had excluded conspecificity.

clathrata Chaudoir, 1864

Dromica clathrata Chaudoir, 1864: 8

Junior synonym of *Dromica quinquecostata*; Horn 1896b: 353, Horn 1926a: 86, Wiesner 1992: 61, Werner 2000a: 103.

Junior synonym of *Pseudodromica quinquecostata* (comb. n.).

COARCTATA Dejean, 1826

Dromica Coarctata Dejean, 1826: 435.

Type-species of the genus Dromica Dejean, 1826.

Cosmema coarctata; Fleutiaux 1892: 37, Péringuey 1893: 91, Péringuey 1896: 112.

Dromica coarctata, XIII. Gruppe "coarctata"; Horn 1926a: 92.

Dromica coarctata; Wiesner 1992: 66, Werner 2000a: 157.

TYPE LOCALITY. "...cap de Bonne-Espérance".

Type specimens. Number not given, but both sexes included (MNHN).

ILLUSTRATIONS. Habitus (Werner 2000a, colour figs 138, 138.1, 138.2); left elytron (Horn 1922, p. 95, figs 5, 7; Horn 1940, pl. 19, figs 4, 5); aedeagus (Cassola, this paper, fig. 29).

DISTRIBUTION. <u>Botswana</u>. Kalahari (Wiesner 1992). <u>South Africa</u>. "Cap de Bonne-Espérance" (Dejean 1826; Chaudoir 1864). *Eastern Cape*: Graaff-Reinet (Péringuey 1896, sub *Cosmema aspera*); Sunday's River nr Graaff-Reinet (Péringuey 1893; TMSA, FCC); Sunday River (Péringuey 1893, sub *Cosmema hamata*); Blue Cliff (Werner 2000a); Port Elizabeth (Péringuey 1893); Grahamstown (Péringuey 1893; Werner 2000a; FCC, MRAC, NCI, TMSA); "Grah. I, Grah. Ton" (Döbler 1973, sub *hamata*); Bathurst (Péringuey 1893); Algoa Bay [33°58S-25°35E] (FCC, TMSA); Somerset East (Werner 2000a, ssp. *kehmiini*; CIC); Queenstown (FCC); Mountain Zebra NP (CIC); Vosloo Kudu R. [Andries Vosloo Koedoe NR] (CIC); Zuurberg [Suurberg, 33°15S-25°30E] (CIC); Dunbrody [33°28S-25°33E] (MRAC, NCI); Kirwood, 20 km W Paterson (FCC). <u>Lesotho</u>. Basutholand (FCC).

Remarks. Type species of genus *Dromica*, by Dejean's (1826) original designation. However, Dejean never formally described such a genus, just providing a description of this species instead.

COARCTATA Latreille & Dejean, 1822

Nomen nudum.

Cicindela coarctata Latreille & Dejean, 1822: 37, t. 1, f. 5.

Remarks. This species was fully described by Dejean (1826) only, to whom authorship has therefore to be recognized.

COMPLETA W. Horn, 1901

Myrmecoptera polyhirmoides var. completa Horn, 1901: 123.

"Compl-F" of Dromica polyhirmoides, IV. Gruppe "clathrata-Mauchi"; Horn 1926a: 87.

Junior synonym of *Dromica polyhirmoides*; Wiesner 1992: 62, Werner 2000a: 109.

Junior synonym of *Pseudodromica polyhirmoides* (comb. n.).

Type locality. "Umtali".

Type specimens. Number not given, but both sexes included (ZMB?).

CONCINNA Péringuey, 1904

Dromica (Cosmema) concinna Péringuey, 1904: 448.

Dromica concinna, XV. Gruppe "transitoria-auropunctata-elegantula"; Horn 1926a: 93.

Cosmema transitoria concinna; Horn 1935a: 103.

Dromica concinna; Horn 1940: 275, Wiesner 1992: 66, Werner 2000a: 166.

Type locality. "Low Country of Pietersburg, not far from Leydsdorp, near the Swiss Mission Station of Shilouvane".

Type specimens. " $\eth \$?": 1 $\eth \$ (SAM); 1 $\$ (SAM!; Cochrane 1995).

ILLUSTRATIONS. Habitus (Werner 2000a, colour figs 150, 150.1, 150.2, 150.3); left elytron (Horn 1940, pl. 20, fig. 6); aedeagus (Horn 1935, fig. 1); habitat (Werner 2000a, figs 134.3, 150.4).

DISTRIBUTION. Zimbabwe. *Matabeleland North*: Bulawayo (DEI). <u>South Africa</u>. Swandini NR (ACBRI). *North-West*: Platrivier [25°10S-28°05E] (TMSA). *Northern Province*: Shilouvane nr Leydsdorp (Péringuey 1904, Werner 2000a; FCC, MRAC, NCI, SAM, TMSA); Chilovane (FCC); 15 km E Klaserie: Guernsey Farm (FCC, HFHC); Waterberg: Geelhoutbosch Farm (Werner 2000a; FCC, KWC); Thabazimbi (Werner 2000a; FCC, KWC); Ofcolaco: Makhutswe River (Werner 2000a; FCC, KWC); Zoutpansberg: Thabina (TMSA). *KwaZulu/Natal*: Mkuzi GR: Mantuma Camp [27°38S-32°13E] (DWBC); Hluhluwe GR: 5 km S Hilltop Camp [28°08S-32°06E] (DWBC).

REMARKS. Until better information, because of important differences in elytral puncturation, *concinna* and *transitoria* are here considered to be two distinct species. A similar species, *schuelei* nov., has a distinctly shorter pronotum.

CONFLUENTESCULPTA W. Horn, 1913

Dromica (Cosmema) confluentesculpta Horn, 1913: 275.

Dromica confluentesculpta, XII. Gruppe "furcata-alboclavata"; Horn 1926a: 92.

Dromica confluentesculpta; Wiesner 1992: 66, Werner 2000a: 156.

Type locality. "1 ♂, Kapoya ...; 1 ♀, Tekanini".

Type specimens. 1 δ (MRAC!); 1 \circ (DEI!).

ILLUSTRATIONS. Habitus (Werner 2000a, colour fig. 136).

DISTRIBUTION. <u>D. R. Congo</u>. *Shaba*: Kapoya (Horn 1913; Burgeon 1937; Werner 2000a; MRAC); Tekanini (Horn 1913; Burgeon 1937; DEI).

REMARKS. Just the two type specimens are known so far in all. A further description was subsequently provided by Horn (1935a). However, the taxonomic place of this distinctive species is still unclear, as its unusual elytral sculpture (with three longitudinal, slightly oblique, depressions on each elytron) would seem to exclude any relation with the "coarctata-marginella" group. Male genitalia have not been examined.

CONFUSA Cassola, 1986

Dromica confusa Cassola, 1986b: 340.

Dromica confusa; Wiesner 1992: 64, Werner 2000a: 142.

Type locality. "Shaba: Zilo, Kanzenze. Uganda: Mbale".

Type specimens. Holotype & (MRAC!); allotype \(\text{(MRAC!)}; 1 \(\delta , 2 \) \(\Q \) (DEI!); 8 \(\delta \delta , 10 \) \(\Q \)

(FCC!); $1 \ \copy{}^{\circ}$ (JWC!); $1 \ \copy{}^{\circ}$ (KWC!); $11 \ \copy{}^{\circ}$ $\copy{}^{\circ}$ $\copy{}^{\circ}$ (MRAC!); $1 \ \copy{}^{\circ}$, $1 \ \copy{}^{\circ}$ (VAC!).

ILLUSTRATIONS. Habitus (Werner 2000a, colour fig. 115).

DISTRIBUTION. <u>Uganda</u>. <u>Elgon</u>: Mbale (Cassola 1986b; NMN). <u>D. R. Congo</u>. <u>Shaba</u>: Kanzenze (Cassola 1986b; Werner 2000a; FCC, MRAC, PSC, VAC); Zilo (Cassola 1986b; Werner 2000a; FCC, JWC, KWC, MRAC, VAC); Kinda (Cassola 1986b; MRAC).

CONNEXA Péringuey, 1893

Cosmema connexa Péringuey, 1893: 90.

Junior synonym of Cosmema alboclavata; Horn 1897d: 62, Péringuey 1898: 308.

Junior synonym of *Dromica alboclavata*; Horn 1926a: 92, Wiesner 1992: 66, Werner 2000a: 155. *Dromica connexa* (**b. sp.**).

Type Locality. "Natal (Frere)".

Type specimens. "possible syntypes" (SAM; Cochrane 1995); 6 syntypes (DEI!; Döbler 1973).

DISTRIBUTION. <u>South Africa</u>. *KwaZulu/Natal*: Frere (Péringuey 1893; SAM, DEI); Estcourt (Cochrane 1995). "Moromanga, Malagasy Rep." (FCC: erroneous label data!).

REMARKS. Synonymy with *alboclavata* was established by Horn (1897d: "*Cosm. connexa* Pér. (*C. marginella* Chd.) ist = *C. alboclavata* D."). In contrast, possibly a distinct full species. Until recently, I supposed *connexa* to be the species which has been recently described under the name of *endroedyi*. However, the whole group of *marginella* should definitely be deeply reviewed, based on examination of type specimens and of large, recent, well-labeled material.

CONSIMILIS Bertoloni, 1858

Dromica limbata var. consimilis Bertoloni, 1858: 311.

Junior synonym of Dromica Saundersi; Horn 1926a: 90.

Dromica consimilis; Wiesner 1992: 64, Werner 2000a: 141.

Type locality. "Mozambico".

Type specimen. 1 & (MZUB?: not mentioned by Tommasini & Marini 1988).

ILLUSTRATIONS. Habitus (Junod 1899, pl. V, fig. 1, sub *Myrmecoptera limbata*; Werner 2000a, colour figs 113, 113.1); aedeagus (Cassola, this paper, fig. 88); live specimens (Werner 2000a, colour fig. 113.3; Cassola, this paper, colour fig. 155); habitat (Werner 2000a, fig. 113.2).

DISTRIBUTION. South Africa. Northern Province: Tzaneen, 63 km S of (BVNC); Makhutswe River: Ofcolaco (KWC); Klaserie (KWC); 15 km E Klaserie: Guernsey Farm (ACBRI, FCC); Leydsdorp (TMSA); Shilouvane nr Leydsdorp (FCC, MRAC); Gravelotte (TMSA); Zoutpansberg (DEI, NCI); Louis Trichardt: Ben Lavin NR (Werner 2000); Hans Merensky NR [23°42S-30°44E] (Werner 2000a; CIC, FCC, KWC, NCI). Mpumalanga: Lydenburg (FCC, TMSA); Kruger NP: Pumbe Sands (FCC, TMSA); Kruger NP: Skukuza (FCC, TMSA); Kruger NP: Skukuza-Malelaan (NCI); Kruger NP: Lebombo Mt. [25°10S-32°02E] (FCC); Kruger NP: Punda Maria at Mahonie Loop [22°40S-30°59.8E] (DWBC). KwaZulu/Natal: Hluhluwe (FCC, TMSA); St. Lucia (TMSA); Sodwana Bay (CIC); Maputa (TMSA); Manguzi River nr Maputa (TMSA); Mkuzi GR (CMNH, FCC, KWC, NCI, PSC); Ndumu GR (HFHC, NCI, VTC). Mozambique. Gaza: Gazaland (DEI). Maputo: Delagoa Bay [=Maputo] (Chaudoir 1865, M. saundersii; DEI); Tembé (Junod 1899, sub "Myrmecoptera Saundersonii"; MRAC).

REMARKS. Synonimy of *consimilis* and *saundersii* was established by Horn (1904a, 1910b, 1926a), who nevertheless maintained Chaudoir's name for the species. I had already observed elsewhere (Cassola 1975) that, if such a synonymy will be confirmed, this species should be given Bertoloni's

name, which has obviously priority, instead of Chaudoir's one, as Wiesner (1992) and Werner (2000a) have correctly done. A proper understanding of this species group, however, has still to be reached, as 2-3 different species at least appear to be involved in, due to the more or less dilated antennomeres 5-8, the shape of pronotum, the occurrence or lack of a humeral patch, and the fully black vs. partially testaceous labrum of females. Unfortunately, the location of the *consimilis* holotype specimen is unknown. Moreover, the above placing of several specimens (from Shilouvane, Zoutpansberg, Hluhluwe, Ndumu GR, Delagoa Bay and Gazaland) under *consimilis* has to be taken as provisional only, as these specimens exhibit similarly dilated antennomeres 5-8 as *consimilis* but a differently shaped, more raised, behind restricted pronotum. Elytral markings also may differ, as some specimens (for instance from the Kruger NP) have a humeral patch as well, similarly as *filicornis*. Relationship with *specialis* should also be investigated. A \mathcal{P} specimen in BVNC, from Botswana (50 km E Palapye), also has slightly dilated antennae, but it is more recalling of *filicornis*, and it likely is one distinct new species.

CONVEXICOLLIS Péringuey, 1908

Dromica (Cosmema) convexicollis Péringuey, 1908: 271.

Dromica convexicollis, XV. Gruppe "transitoria-auropunctata-elegantula"; Horn 1926a: 94.

Dromica convexicollis; Wiesner 1992: 68, Werner 2000a: 180.

Type locality. "Transvaal (Zoutpansberg)".

Type specimen. "♂" (SAM!).

ILLUSTRATIONS. Habitus (Werner 2000a, colour figs 179, 179.1); elytra, from behind (Horn 1935a, fig. 2); aedeagus (Cassola, this paper, figs 49-50).

DISTRIBUTION. <u>South Africa</u>. "Caffraria" (FCC). *Northern Province*: Zoutpansberg (Péringuey 1908; SAM); Shilouvane nr Leydsdorp (Werner 2000a; DEI, TMSA); Griffin Mine [nr Leydsdorp, 23°59S-30°31E] (Werner 2000a; TMSA). *Mpumalanga*: Marieps Mt (FCC, TMSA); Three Sisters (FCC). *KwaZulu/Natal*: Loteni (CIC).

CORDICOLLIS Chaudoir, 1865

Dromica cordicollis Chaudoir, 1865: 53.

Cosmema cordicollis; Fleutiaux 1892: 36.

Dromica cordicollis, XV. Gruppe "transitoria-auropunctata-elegantula"; Horn 1926a: 94.

Dromica cordicollis; Wiesner 1992: 68, Werner 2000a: 180.

Type locality. "...venant de Natal".

Type specimen. "Femelle" (MNHN).

ILLUSTRATIONS. Habitus (Werner 2000a, colour fig. 180).

DISTRIBUTION. <u>South Africa</u>. *KwaZulu/Natal*: Natal (Chaudoir 1865; Werner 2000a; MRAC); Zulu (BMNH, FCC); Estcourt (TMSA); Frere (FCC); 22 km W Magudu (PSC).

CORDICOLLIS Péringuey, 1893

Cosmema cordicollis Péringuey, 1893: 86.

"...a female example of Cosmema Gruti"; Péringuey 1893: 86.

Junior synonym of *Dromica sexmaculata*; Horn 1926a: 94, Wiesner 1992: 68, Werner 2000a: 182.

COSTATA Péringuey, 1893

Myrmecoptera costata Péringuey, 1893: 69.

Dromica Bertolonii costata, IV. Gruppe "clathrata-Mauchi", Untergruppe "Bertolonii-nobilitata"; Horn 1926a: 88.

Dromica costata; Wiesner 1992: 63, Werner 2000: 121.

Type locality. "Marico and Potchefstroom (Transvaal)".

TYPE SPECIMEN. "Male unknown"; 1 ♀ (SAM; "the specimen bears no Péringueys type label, only a Hesse paratype label": Cochrane 1995).

ILLUSTRATIONS. Habitus (Péringuey 1893, pl. 2, fig. 6; Werner 2000a, colour fig. 90.1); left elytron (Horn 1940, pl. 23, fig. 4); aedeagus (Cassola, this paper, fig. 97).

DISTRIBUTION. <u>Botswana</u>. *Southern*: Gaborone (CMNH, FCC). <u>South Africa</u>. "Cap Bon Spei" (DEI). *North-West*: Potchefstroom (Péringuey 1893; Werner 2000a; DEI); Marico (Péringuey 1893).

REMARKS. The female specimen, from Shilouvane, pictured by Werner (2000a, fig. 90) is likely a *quadricostata* (m. *horni*) specimen.

CRASSEREDUCTA W. Horn, 1909

Dromica (Myrmecoptera) Bennigseni crassereducta Horn, 1909a: 92.

Dromica Bennigseni crassereducta, V. Gruppe "Bennigseni-egregia"; Horn 1926a: 88.

Dromica bennigseni crassereducta; Wiesner 1992: 63, Werner 2000a: 124.

Dromica crassereducta (b. sp.).

Type locality. "Busi-Tal (Portug. Ostafrika)".

Type specimen. "1 9" (DEI!).

ILLUSTRATIONS. Habitus (Werner 2000a, colour figs 93b, 93b.1; Cassola, this paper, colour fig. 166); left elytron (Horn 1940, pl. 17, fig. 8); aedeagus (Cassola, this paper, fig. 85).

DISTRIBUTION. <u>Malawi</u>. *South*: Mlanje [=Mulanje] (Werner & Dudley 1998; Werner 2000a; BMNH, FCC). <u>Mozambique</u>. *Sofala*: Busi River valley (Horn 1909a; Werner 2000a). *Zambesia*: Gilé NR [Reserva do Gili]: Nakalolo (FCC).

Remarks. Important differences in body size, elytral markings and shape of aedeagus would suggest to consider *crassereducta* a distinct species, instead of a subspecies of *bennigseni*.

CREBREPUNCTATA W. Horn, 1929

Dromica Strandi crebrepunctata Horn, 1909: 315.

Dromica strandi crebrepunctata; Wiesner 1992: 67, Werner 2000a: 170.

Junior synonym of Foveodromica strandi (syn. n., comb. n.).

Type Locality. "ad fluminen Kawa".

Type specimen. Holotype ♀ (DEI!).

ILLUSTRATIONS. Habitus (Werner 2000a, colour fig. 155a).

REMARKS. Until better information, *crebrepunctata* is here considered to be a junior synonym of *strandi*, as a subspecific status does not seem to have been sufficiently documented. However, future material may even show it to be a distinct species.

CRISTAGALLI W. Horn, 1935

Cosmema crista-galli Horn, 1935a: 101.

CASSOLA

Dromica cristagalli; Wiesner 1992: 68, Werner 2000a: 179.

Type locality. "Port Grosvenor (Südost-Kap-Kolonie)".

Type specimen. "1 9" (DEI!).

ILLUSTRATIONS. Habitus (Werner 2000a, colour fig. 177); elytra, from behind (Horn 1935a, fig. 3); aedeagus (Cassola, this paper, fig. 52).

DISTRIBUTION. <u>South Africa</u>. *Eastern Cape*: Port Grosvenor (Horn 1935a); Port St. Johns (TMSA); Port St Johns: Silaka [31°33S-29°30E] (Werner 2000a; FCC).

CUPRICOLLIS W. Horn, 1913

Dromica (Myrmecoptera) Neumanni subsp. cupricollis Horn, 1913: 271.

Dromica egregia cupricollis, V. Gruppe "Bennigseni-egregia"; Horn 1926a: 89.

Dromica egregia cupricollis; Wiesner 1992: 63.

Dromica cupricollis; Werner & Dudley 1998: 584, Werner 2000a: 128.

Type locality. "près Kiambi (village de Niemba Kunda), Tekanini, Mufungwa".

Type specimens. 2 $\eth \eth$ (DEI!); 2 $\eth \eth$, 1 \circlearrowleft (MRAC!).

ILLUSTRATIONS. Habitus (Burgeon 1937, pl. 1, fig. 8; Basilewsky 1951, pl. 6, fig. 9; Werner & Dudley 1998, fig. 7; Werner 2000a, colour fig. 95; Werner 2000a, colour figs 94d, 94d.1, sub *D. egregia cupriscapularis*; Cassola, this paper, colour fig. 165); left elytron (Horn 1940, pl. 17, fig. 14); aedeagus (Cassola, this paper, fig. 64).

DISTRIBUTION. Central African Republic?. "Haute-Sangha" (Horn, in Burgeon 1937). D. R. Congo. Haut Zaïre: River Duru (Cassola 1978b; MSNG); Garamba NP: Ndelele (Basilewsky 1962b, sub D. egregia neumanni; FCC, MRAC). Shaba: Elizabethville [=Lubumbashi] (Horn 1929a; Werner 2000a; ABC, CMNH, JPC, JWC, MRAC); Lubumbashi (MRAC, FCC); Tumbwe [35 km W Elisabethville] (Horn 1929a; MRAC); Jadotville [=Likasi] (MRAC); Kiambi: Kibimbi (Horn 1913; MRAC); Tekanini (Horn 1913; MRAC); Mufungwa (Horn 1913; MRAC); Kapiri (Horn 1914b; MRAC); Manono nr Mitwaba (MRAC); Mura (MRAC); Lualaba: Mutaka nr Karanda (MRAC); Tshibobe (Horn 1929a); Kiambi (Horn 1913); Madona-Bangweolo (Burgeon 1937; MRAC); La Kanda (Horn 1929a). Zambia. Northern: Chiengi: Lake Mweru (Brouerius van Nidek 1980, ssp. cupriscapularis; Werner 2000a; FCC, MRAC); Mweru-Wantipa (Brouerius van Nidek 1980, ssp. cupriscapularis; IRSNB); Abercorn [=Mbala] (Brouerius van Nidek 1980, ssp. cupriscapularis). Tanzania. Rukwa: Sumbawanga (MRAC). Ruvuma: Kigonsera (MCZR). Malawi. South: Zomba (Werner & Dudley 1998); Limbe (Werner & Dudley 1998). Mozambique (new country record!). Zambesia: Gilé NR [Reserva do Gili]: Nakalolo (FCC).

REMARKS. The poorly inflated labial palpi clearly separate *cupricollis* from all other related species. Together with *globicollis* and the carabid species *Eccoptoptera cupricollis* Chd., *cupricollis* is obviously a mymic of a female mutillid wasp (Burgeon 1937). It is interesting to notice that Burgeon (1937) recorded both *cupricollis* and *elongatoplanata* (sub *neumanni*) from a same locality (Madona-Bangweolo) at least, what seems to strengthen their concept of full distinct species. However, specimens from southern Congo should be carefully re-examined. From the few available data, *cupricollis* would result to be the northernmost known *Dromica* species, having been found in the Garamba NP, thus approximately over 4° of latitude N.

CUPRISCAPULARIS Brouerius van Nidek, 1980

Dromica egregia cupriscapularis Brouerius van Nidek, 1980: 134.

Dromica egregia cupriscapularis; Wiesner 1992: 63, Werner 2000a: 127.

Dromica cupricollis cupriscapularis (comb. n.).

Type locality. "Zambia...Chiengi (Lake Mweru)".

Type specimens. Holotype ♂ (MRAC!); allotype ♀ (IRSNB!); 5 paratypes (MRAC!).

ILLUSTRATIONS. Habitus (Werner 2000a, colour figs 94d, 94d.1).

DEFLEXICOLLIS W. Horn, 1932

Dromica (Myrmecoptera) Erlangeri deflexicollis Horn, 1932a: 201.

Dromica erlangeri deflexicollis; Wiesner 1992: 63, Werner 2000a: 117.

Type locality. "Marsabit et Kukal ... in Prov. Kenya".

Type specimens. "2 9?": 1 9 (BMNH!); 1 9 (DEI!).

ILLUSTRATIONS. Habitus (Werner 2000a, colour fig. 85a).

DENSEPUNCTATA W. Horn, 1909

Dromica (Cosmema) densepunctata Horn, 1909d: 101.

Dromica densepunctata, XV. Gruppe "transitoria-auropunctata-elegantula"; Horn 1926a: 94.

Dromica densepunctata; Wiesner 1992: 67, Werner 2000a: 169.

Foveodromica densepunctata (comb. n.)

Type locality. "Serenje District (N.O.-Rhodesia)...S.O.-Katanga"]

Type specimens. "2 9?": 1 9 (BMNH!); 1 9 (DEI!).

ILLUSTRATIONS. Habitus (Werner 2000a, colour figs 153, 153.1); aedeagus (Cassola, this paper, fig. 110).

DISTRIBUTION. <u>D. R. Congo</u>. *Shaba*: SE Katanga (Horn 1929d; BMNH); Elisabethville [=Lubumbashi] (Burgeon 1937; MRAC, BMNH); Lubumbashi (Werner 2000a; MRAC, FCC); Jadotville [=Likasi] (MRAC); Luashi (FCC); Mitwaoua (FCC). <u>Zambia</u>. *North-Western*: Kashitu, N of Broken Hill (BMNH); Solwezi distr. [26°20E-12°10S] (BMNH); Solwezi (Werner 2000a). *Central*: Serenje (Horn 1909d; DEI). *Eastern*: Kasanka NP Waka Camp [12°30S-30°15E] (NCI). REMARKS. Wiesner (1992), followed by Werner (2000), recorded this species from Zimbabwe as well ("NO Zimbabwe"). However, the type locality clearly refers to present-day Zambia instead.

DIFFERENS Cassola, 1986

Dromica differens Cassola, 1986b: 344.

Dromica differens; Wiesner 1992: 65, Werner 2000a: 147.

Type locality. "Shaba (Lulua): Kapanga".

ILLUSTRATIONS. Habitus (Werner 2000a, colour figs 123, 123.1).

DISTRIBUTION. <u>D. R. Congo</u>. *Shaba*: Tshibalaka, riv. Luiza, Kaongwesi (Cassola 1986b; FCC, MRAC); riv. Kalani, Tshibamba, Lomami: Kamina (Cassola 1986b; MRAC); Sandoa (Cassola 1986b; FCC, MRAC); Kapanga, Riv. Kapelekese (Cassola 1986b, Werner 2000; FCC, MRAC); Mayaka: riv. Kahangaepi (FCC, IRSNB); Lomami: Kaniama? (Cassola 1986b; MRAC); Kasaji:

Cassola Cassola

Dilolo? (Cassola 1986b; MRAC).

DILACERATA W. Horn, 1931

Myrmecoptera nigroplagiata subsp. dilacerata Horn, 1931: 345.

Dromica nigroplagiata dilacerata; Wiesner 1992: 65, Werner 2000a: 147.

Type Locality. "SW-Katanga (Sandoa am Oberen Lulua)".

Type specimens. Number not given, but both sexes included; 7 syntypes (DEI!), 15 syntypes (MRAC!).

ILLUSTRATIONS. Habitus (Burgeon 1937, p. 17; Werner 2000a, colour fig. 122a).

DISCOIDALIS W. Horn, 1897

Cosmema discoidalis Horn, 1897b: 237.

Dromica discoidalis, X. Gruppe "laticollis-ramigera"; Horn 1926a: 91.

Dromica discoidalis; Wiesner 1992: 65, Werner 2000a: 150.

TYPE LOCALITY. "Transvaal".

Type specimen. "1 9" (DEI!).

ILLUSTRATIONS. Habitus (Horn 1910b, pl. 11, fig. 1, colour drawing; Werner 2000a, colour figs 127, 127.1).

DISTRIBUTION. <u>South Africa</u>. *Mpumalanga*: Komatipoort (Horn 1897b; Werner 2000a; DEI). *KwaZulu/Natal*: Mkuzi (Werner 2000a; TMSA).

Remarks. Two female specimens only are apparently known so far. Shape of elytra and elytral markings would suggest to tenatively place this species near *laticollis*.

DISSEPTA Péringuey, 1896

Myrmecoptera dissepta Péringuey, 1896: 116.

Dromica polyhirmoides dissepta, IV. Gruppe "clathrata-Mauchi"; Horn 1926a: 87.

Dromica polyhirmoides dissepta; Wiesner 1992: 62, Werner 2000a: 110.

Junior synonym of *Pseudodromica polyhirmoides* (comb. n., syn. n.).

Type locality. "Zambesia (Umfuli River)".

Type specimen. "Male unknown": 1 \(\phi\), "syntype" (SAM; "the specimen bears no Péringuey type label, only a Hesse paratype label": Cochrane 1995).

ILLUSTRATIONS. Habitus (Werner 2000a, colour figs 79b, 79b.1, 79b.2).

Remarks. Until better information this form is herein considered to be merely a junior synonym.

DOLOSA Péringuey, 1894

Cosmema dolosa Péringuey, 1894: 452.

Dromica dolosa, XV. Gruppe "transitoria-auropunctata-elegantula"; Horn 1926a: 94.

Dromica dolosa; Wiesner 1992: 67, Werner 2000a: 167.

Type locality. "Mashunaland (Salisbury)".

Type specimens. Number not given, but both sexes included; 1 ♂ (DEI!).

ILLUSTRATIONS. Habitus (Werner 2000a, colour figs 151, 151.1, 151.2); aedeagus (Cassola, this paper, fig. 105).

DISTRIBUTION. Zambia. Kafue River (Werner 2000a; FCC, KWC); Mazabuka [SW of Lusaka] (FCC,

KWC; Werner 2000a). Malawi. Central: Chikala FR [Nkatha Bay] (Werner & Dudley 1998). South: Malosa Mt. [=Malasa, 15°15S-35°18E] (Werner & Dudley 1998); Mulanje Mt. (Werner & Dudley 1998); Mulanje (MRAC). Zimbabwe. Mashonaland West?: Zambesia (DEI); Mashuna (DEI, MNHN). Mashonaland East: Salisbury [=Harare] (Péringuey 1894, 1896; MNHN, TMSA). Manicaland: Mt. Chirinda (Horn 1903a). Masvingo: Lake Mutirikwi (Werner 2000a; FCC, KWC). Mozambique. Sofala: Salone f. Marromeu (Mandl 1963). South Africa. Natal (Werner 2000a).

REMARKS. Re-described by Horn (1935a). A puzzling species, whose taxonomic placement is far from being clear. Despite a certain similarity with *traducens* and allied species, the poorly inflated labial palpi and the short, bulky aedeagus do not fit such a group.

EGREGIA Germar, 1843

Myrmecoptera egregia Germar, 1843: t. 124, fig. 2.

Type-species of the genus Myrmecoptera Germar.

Myrmecoptera egregia; Fleutiaux 1892: 35.

Dromica egregia, V. Gruppe "Bennigseni-egregia"; Horn 1926a: 88.

Dromica egregia; Wiesner 1992: 63, Werner 2000a: 124.

Type locality. "Habitat in Africa intermedia (Fesogl.)".

Type specimen. Holotype ♀ (ZMB?).

ILLUSTRATIONS. Habitus (Germar 1843, pl. 124, fig. 1 [sic!, but fig. 2]; Werner 2000a, fig. 94, colour picture of holotype).

DISTRIBUTION. Sudan? Zambia?

Remarks. It is ironic that one of the first described *Dromica* species and the type species of genus *Myrmecoptera* is still one of the least known species. As a matter of fact, it is not easy to understand what exactly *egregia* is, and where it occurs. Its type locality, as it was indicated by Germar (1843), would indicate it to inhabit the Sudanese province of Blue Nile (Fazogli: Horn 1910b & 1926, Wiesner 1992; Sennar: Werner 2000a) or rather the White Nile region (Fashoda, present-day Kodok, N of Malakal), but Werner (2000a) has interestingly pointed out that Dohrn (1883) had mentioned *egregia* as originated from "Fassogl, 150 miles from the Zambesi", thus from a perhaps exceedingly southern location which, in fact, would better fit Germar's indication of "Africa intermedia" (Cassola & Miskell, 2001).

Anyway, within or around *egregia* a difficult tiger beetle complex has been identified which is definitely in need to be deeply reviewed. Germar's original figure (see also Werner 2000a, fig. 94) shows *egregia* to be rather similar to *elongatoplanata*, may be even conspecific. Until re-discovery and re-examination of Germar's type specimen (apparently in ZMB collection: see Horn 1922), and possibly availability of recent well-labelled specimen referable to the same species become possible, it seems to be preferable to consider here the several "subspecies" or forms which have been attached to *egregia* as separate species. Werner & Dudley (1998) have already proposed full specific status for *cupricollis*. Moreover, three other distinct species at least - *neumanni*, *tarsalis* and *elongatoplanata* - should be recognized within the *egregia*-complex. These appear to be mostly vicariant, but some range overlappings are noticeable.

ELEGANTULA Boheman, 1848

Cosmema elegantula Boheman, 1848: 24.

CASSOLA CASSOLA

Cosmema elegantula; Fleutiaux 1892: 36

Dromica elegantula, XV. Gruppe "transitoria-auropunctata-elegantula"; Horn 1926a: 94.

Dromica elegantula; Wiesner 1992: 68, Werner 2000a: 179.

Type Locality. "Habitat ad Portum Natalense rarius".

Type specimens. Number not given, but both sexes included: $1 \ 3$, $1 \ 9$ (NHRS; Basilewsky, pers. comm.).

ILLUSTRATIONS. Habitus (Werner 2000a, colour fig. 178); left elytron (Horn 1940, pl. 18, fig. 15); aedeagus (Cassola, this paper, fig. 48).

DISTRIBUTION. <u>South Africa</u>. *KwaZulu/Natal*: "Caffraria" (Horn 1892, sub *Cosmema intermedia*; Péringuey 1893); "Cafrerie" (FCC); "Zoulouland" (Werner 2000a); Natal (Chaudoir 1864; FCC, MNHN, MRAC); Port Natal (Boheman 1848); Durban (Péringuey 1893); Frere (Péringuey 1893); Pietermaritzburg (Péringuey 1893, sub *Cosmema brevipennis*); Malvern (TMSA).

ELONGATOPLANATA W. Horn, 1922

Myrmecoptera egregia subsp. elongato-planata Horn, 1922: 97.

Dromica egregia elongato-planata, V. Gruppe "Bennigseni-egregia"; Horn 1926a: 89.

Dromica egregia elongatoplanata; Wiesner 1992: 63, Werner 2000a: 126.

Dromica elongatoplanata (b. sp.).

Type locality. "1 9 & Bihawana, 1 & Mpongwe: Africa orient. olim 'Germanica' (Ertl)".

Type specimens. 2 $\eth \eth$, 1 \circlearrowleft (DEI!; not listed by Döbler 1973).

ILLUSTRATIONS. Habitus (Werner 2000a, colour figs 94c, 94c.1, 94c.2, 94c.3, 94c.4, 94c.5, 94c.6); left elytron (Horn 1940, pl. 17, fig. 13); aedeagus (Cassola, this paper, fig. 63); live specimens (Cassola, this paper, colour figs 146, 147, 148); habitat (Werner 2000a, fig. 94c.7).

DISTRIBUTION. <u>Tanzania</u>. *Arusha*: Babati (Werner 2000a; KWC). *Kilimanjaro*: Moshi (JPC). *Singida*: 35 mi E Singida: Maagaa (BMNH, FCC). *Dodoma*: Dodoma (BMNH); Bihawana [6°16S-35°38E] (Horn 1922). Rungwa (KWC); Mitundo (FCC, KWC); Babati-Kondoa (Werner 2000a; KWC); Babati: 30 km to Kondoa (Werner 2000a; KWC). *Mbeya*: Ujewa (FCC). *Iringa*: Ruaha NP (Werner 2000a; KWC); Ifunda (Werner 2000a; KWC). *Lindi*: Tendaguru (BMNH). <u>D. R. Congo</u>. *Kasai*: N'Gombe (MRAC). *Shaba*: Madona-Bangweolo (Burgeon 1937, sub *D. egregia neumanni*; MRAC). <u>Zambia</u>. *Northern*: N.West-Rhodesia (MCZR); Mpongwe (Horn 1922). <u>Malawi</u>. *Central*: 20 km NW Dedza (FCC).

REMARKS. The elongate elytral shape, the slightly different proportions of body parts, and the apparent overlapping of geographical ranges, seem to suggest *elongatoplanata* to be a distinct species in the *egregia* group, other than *tarsalis*. It is interesting to notice that Burgeon (1937) recorded both *elongatoplanata* (sub *neumanni*) and *cupricollis* from a single locality (Madona-Bangweolo) at least, what seems to strengthen their concept as distinct full species. However, specimens from southern Congo should be carefully re-examined.

ENDROEDYI Schüle & Werner, 1999

Dromica endroedyi Schüle & Werner, 1999: 458.

Type Locality. "Transvaal, Piet Retief".

Type specimens. Holotype 3 (TMSA); 3 33, 399 (FCC!); 3 33 (KWC); 19 (PSC).

ILLUSTRATIONS. Aedeagus: right lateral and dorsal aspects (Schüle & Werner 1999, fig. 1); aedeagus (Cassola, this paper, fig. 33).

DISTRIBUTION. South Africa. Mpumalanga: Piet Retief (FCC, PSC, KWC).

REMARKS. Known so far from the type locality only. This species is remarkable because it possesses a quite unusual puzzling structure, i.e. a "finger-shaped spur" on the right side of the male aedeagus, first described by Schüle & Werner (1999), which is apparently lacking in all related species but *D. miranda*.

ERIKSSONI Péringuey, 1892

Myrmecoptera Erikssoni Péringuey, 1892a: 5.

Dromica Erikssoni, IX. Gruppe "specialis-limbata"; Horn 1926a: 91.

Dromica erikssoni; Wiesner 1992: 65, Werner 2000a: 145.

Type locality. "Northern Ovamboland... two examples".

ILLUSTRATIONS. Habitus (Werner & Wiesner 1994, p. 76, fig. 21, holotype; Werner 2000a, colour figs 120, 120.1).

DISTRIBUTION. Namibia. "Northern Ovamboland" (Péringuey 1892a, 1893; Werner 2000a); "Nord-Amboland" (Horn 1908b; Werner 2000a).

REMARKS. Probably just the two type specimens are presently known, of which I could examine the DEI specimen only. Depository of the second specimen is not apparently in SAM (Cochrane 1995). *D. mesothoracica* and *D. prolongatesignata* have been considered to be subspecies of *D. erikssoni*, but both of them deserve a full specific status.

ERLANGERI W. Horn, 1904

Dromica (Myrmecoptera) Erlangeri Horn, 1904b: 426.

Dromica erlangeri, IV. Gruppe "clathrata-Mauchi", Untergruppe "Bertolonii-nobilitata"; Horn 1926a: 87.

Dromica erlangeri; Wiesner 1992: 63, Werner 2000a: 116.

Type locality. "... zwischen Gurgura und Gololoda gesammelt".

Type specimen. "Ein ♀" (DEI!).

ILLUSTRATIONS. Habitus, labrum, aedeagus (Werner 1993a, pp. 75-76, figs 1, 3, 8, 10); habitus (Werner 2000a, colour figs 85, 85.1, 85a); aedeagus (Cassola, this paper, figs 80); larvae (Werner 2000a, colour fig. 85.2); live specimens (Cassola, this paper, colour figs 149, 150, 151); habitat (Werner 2000a, figs 85.3, 85a.1).

DISTRIBUTION. <u>Ethiopia</u>. "Gurgura-Gololoda" (Horn 1904b; Cassola 1978a; Werner 1993b; DEI). *Gemu Gofa*: 50 km S Arba Minch (Werner 1993b, 2000); Konso (Werner 1993a&b, 1994, 2000a; FCC); 10 km W Konso (Werner 2000a). <u>Somalia?</u>. "Süd-Somali" (Horn 1910, 1926; Cassola & Miskell 1990). <u>Uganda</u>. Sukh Plains nr Nepal Pass (FCC). <u>Kenya</u>. *Marsabit*: Kulal [37°E-2°40N] (Horn 1932a, ssp. *deflexicollis*; Werner 2000a; DEI). *Eastern*: Marsabit (Horn 1932a, ssp. *deflexicollis*; BMNH). *Rift Valley*: Laikipia: Rumuruti (MSTV).

Remarks. The complex of *erlangeri*, *abukari*, *nobilitata* (with its supposed subspecies *reducta* and *interruptemaculata*), *hildebrandti* and *kenyana* should be reviewed, based on larger East African materials. Relationships and respective distributions have not been fully cleared in so far.

CASSOLA CASSOLA

ERTLI W. Horn, 1903

Dromica (Myrmecoptera) Schaumi subsp. Ertli Horn, 1903b: 320.

Dromica Schaumi Ertli, V. Gruppe "Bennigseni-egregia"; Horn 1926a: 89.

Dromica schaumi ertli; Wiesner 1992: 64, Werner 2000a: 131.

Dromica ertli (b. sp.).

Type locality. "Lukuledi: D.O.-Afrika: 200 Klm. einwärte von Lindi, 8 Wegstunden vom Rovuma-Fluß".

Type specimen. "1 ♀" (DEI!).

ILLUSTRATIONS. Pronotum (Horn 1940, pl. 16, fig. 5); habitus (Werner 2000a, colour figs 98a, 98a.1, 98a.2, 98a.3).

DISTRIBUTION. <u>Tanzania</u>. *Iringa*: Makonde [9°59S-34°30E] (Horn 1921). *Ruvuma*: Songea (Werner 2000a). *Mtwara*: Lukuledi [38°30E-10°30S] (Horn 1903b; Werner 2000a; DEI, MRAC). *Lindi*: Lindi (Horn 1903b; JWC, MRAC).

REMARKS. Two male specimens in MRAC, from Lukuledi, were not designated by Horn (1903b) as paratypes. This form is here tentatively raised to full specific status, because of the different elytral pattern and the apparently overlapping ranges. It seems to have a southern Tanzanian distribution, and its occurrence in southern Kenya, questioned by Werner (1993a), is doubtful.

FILICORNIS W. Horn, 1898

Myrmecoptera filicornis Horn, 1898a: 348.

Dromica filicornis, VIII. Gruppe "Saundersi-Junodi"; Horn 1926a: 90.

Dromica filicornis; Wiesner 1992: 64, Werner 2000a: 142.

Type locality. "Transvaal (Komatipoort)".

Type specimen. "1 9" (DEI!).

ILLUSTRATIONS. Habitus (Werner 2000a, colour fig. 116); aedeagus (Cassola 1975, fig. 6, sub *D. saundersi*; Cassola, this paper, fig. 94).

DISTRIBUTION. <u>South Africa</u>. *Gauteng*: 20 km E Pretoria (HFHC). *Northern Transvaal*: Mica-Hoedspruit (Cassola 1975, sub *D. saundersi*; FCC). *Mpumalanga*: Komatipoort (Horn 1898a); 2 mi W Hectorspring nr Komatipoort (Cassola 1975, sub *D. saundersi*; Werner 2000a; FCC, MRAC); Kruger NP: Lebombo Mt. [25°10S-32.02E] (FCC).

Remarks. D. filicornis appears to be very similar to D. consimilis, however the latter species has slightly dilated antennomeres 5-8, while filicornis has filiform antennae. A \mathcal{P} specimen in BVNC, from "P. Henrique" (Mozambique), which unfortunately has no antennae left, resembles filicornis but has a slightly different, more parallel-sided, strongly striated, black pronotum, and it is possibly a new distinct species.

FLAVOVITTATA W. Horn, 1896

Dromica (Myrmecoptera) flavovittata Horn, 1896c: 339.

Myrmecoptera flavovittata; Péringuey 1898: 313.

Dromica flavovittata, V. Gruppe "Bennigseni-egregia"; Horn 1926a: 89.

Dromica flavovittata; Wiesner 1992: 64, Werner 2000a: 136.

Type locality. "Regiones interiores Mosambicenses".

Type specimen. "1 ♂" (DEI!).

ILLUSTRATIONS. Habitus (Werner 2000a, colour figs 105, 105.1); aedeagus (Cassola, this paper, fig.

90).

DISTRIBUTION. ?Zambia. Kabatu (MRAC). ?Zimbabwe. N Zimbabwe (Wiesner 1992, Werner 2000a). Malawi. Chisasira: Chinteche (VAC). Central: Dedza (CROC, FCC). South: Zomba (BMNH); Limbe (BVNC). Mozambique. "Mozamb. interior" (Horn 1896c; Péringuey 1898; Werner 2000a; DEI); "Port. O. Afrika, mittlerer Zambesi" (Werner 2000a).

FORMOSA Péringuey, 1894

Myrmecoptera formosa Péringuey, 1894: 451.

Dromica formosa, IV. Gruppe "clathrata"; Horn 1926a: 87.

Dromica formosa; Wiesner 1992: 62, Werner 2000a: 111.

Pseudodromica formosa (comb. n.).

Type locality. "Mashunaland (Salisbury)".

Type specimens. Number not given, but both sexes included: $1 \ 3, 2 \ 9 \ (DEI!)$.

ILLUSTRATIONS. Habitus (Horn 1940, pl. 12, fig. 2; Werner 2000a, colour figs 80, 80.1, 80.2); aedeagus (Cassola, this paper, fig. 128).

DISTRIBUTION. Zimbabwe. Mashonaland West?: Mashunaland (BMNH, DEI, MRAC). Mashonaland East: Salisbury [=Harare] (Péringuey 1894, 1896; Werner 2000a; BMNH, DEI, NCI, TMSA). Manicaland: Rusape-Nyanga (Werner 2000a: "Nyanza"; FCC, JWC). Matabeleland North: Bulawayo (BMNH). Matabeleland South: Matopos (BMNH); Matabele: Hrd af Seg (MRAC); Matabeleland (MRAC, TMSA).

FOSSULATA Wallengren, 1881

Dromica fossulata Wallengren, 1881: 11.

Dromica fossulata; Fleutiaux 1892: 35.

Myrmecoptera fossulata; Péringuey 1893: 68.

Myrmecoptera Bertolonii fossulata; Horn 1904a: 92.

Dromica Bertolonii fossulata, IV. Gruppe "clathrata-Mauchi", Untergruppe "Bertolonii-nobilitata"; Horn 1926a: 88.

Dromica Bertolonii fossulata; Basilewsky 1953: 191.

Dromica bertolonii fossulata; Wiesner 1992: 63, Werner 2000a: 118.

Dromica fossulata (revised status).

Type locality. "Ad Christianam capta".

Type specimen. Holotype & (MZL: Basilewsky 1953).

ILLUSTRATIONS. Habitus (Werner 2000a, colour figs 87a, 87a.1); left elytron (Horn 1940, pl. 23, figs 1, 2); aedeagus (Cassola, this paper, fig. 99).

DISTRIBUTION. <u>South Africa</u>. *Free State*: Christiana (Wallengren 1881; Péringuey 1893). *Northern Province*: Shilouvane (NCI); "Antioka, N. Transvaal" (DEI). *Mpumalanga*: Low County (JPC, KWC). <u>Mozambique</u>. *Maputo*: Delagoa Bay, Lourenço Marquez [=Maputo] (CMNH, DEI, FCC, JWC, TMSA); Porto Henrique (FCC); Tembe (DEI); 15 S Boane [26°11S-32°19E] (FCC, MSNC); env. Boane (FCC, SBC).

FOVEICOLLIS W. Horn, 1914

Dromica foveicollis Horn, 1914a: 11.

58 Cassola

Dromica foveicollis, XIX. Gruppe "foveicollis"; Horn 1926a: 95.

Dromica foveicollis; Wiesner 1992: 68, Werner 2000a: 187.

Type Locality. "Katanga (Zentral-Afrika)".

Type specimen. "1 3" (DEI!).

ILLUSTRATIONS. Habitus (Horn 1940, pl. 15, fig. 2; Werner 2000a, colour fig. 191).

DISTRIBUTION. <u>D. R. Congo</u>. *Shaba*: Katanga (Horn 1913, 1929a; Burgeon 1937; Werner 2000a; DEI); aedeagus (Cassola, this paper, fig. 104).

REMARKS. The single male holotype specimen only is known so far.

FOVEOLATA Péringuey, 1888

Dromica foveolata Péringuey, 1888: 71.

Dromica foveolata; Fleutiaux 1892: 35.

Myrmecoptera foveolata; Péringuey 1993: 64.

Junior synonym of Cosmema granulata; Horn 1897d: 62.

Junior synonym of *Dromica aspera* Dokhtouroff; Horn 1926a: 91, Wiesner 1992: 65, Werner 2000a: 151.

Dromica foveolata (revised status).

Type locality. "I believe it ... was captured in the Lake N'Gami region".

Type specimen. "One male" (DEI!).

DISTRIBUTION. <u>Namibia</u>. *Erongo*?: Damaraland (Péringuey 1893). <u>Botswana</u>. *Ngamiland*: Ngami Lake (Péringuey 1888). <u>South Africa</u>. *Free State*: Hoopstad (Péringuey 1896). *North-West*: Vryburg: Bordeaux on Mistake (SMWN, FCC). *KwaZulu/Natal*: Durban (Péringuey 1893).

REMARKS. Synonymy with *aspera* was established by Horn (1897d): "*Cosm. foveolata &* Pér. (*Myrmecoptera* sec Pér.) ist = *C. granulata &* D. Der Typus der letzeren hat kaum erweiterte Fühlergld.! diese Form ist vielleicht nur Var. von *C. aspera* D., *C. lateralis* Boh. ist eine andere Species. *C. aspera* Pér. müfste umgetauft werden". However, shape of pronotum (more trapezoid, less parallel-sided) shows *foveolata* to be specifically distinct from *aspera*, and moreover the darker colour and the stronger elytral sculpture clearly separe it from *lateralis*.

FUNDOPLANATA W. Horn, 1909

Dromica (Myrmecoptera) fundoplanata Horn, 1909a: 90.

Dromica fundoplanata, VII. Gruppe "fundoplanata"; Horn 1926a: 90.

Dromica fundoplanata; Wiesner 1992: 64, Werner 2000a: 141.

Type Locality. "Busi-Tal (Portug. Ostafrika)".

Type specimen. "1 9" (DEI!).

ILLUSTRATIONS. Habitus (Horn 1910b, pl. 10, fig. 12, colour illustration; Horn 1940, pl. 12, fig. 1; Werner 2000a, fig. 112, colour picture of holotype).

DISTRIBUTION. Mozambique. Sofala: Buzi River valley (Horn 1909a; Werner 2000a; DEI).

REMARKS. The single female holotype specimen only is known so far.

FURCATA Boheman, 1848

Cosmema furcata Boheman, 1848: 21.

Type-species of Genus Cosmema Boheman, 1848.

Cosmema furcata; Fleutiaux 1892: 36

Dromica furcata, XII. Gruppe "furcata-alboclavata"; Horn 1926a: 92.

Dromica furcata; Wiesner 1992: 65, Werner 2000a: 153.

Type locality. "Habitat in Caffraria interiore in montibus Makkalisensibus".

Type specimens. Number not given, but both sexes probably included (NHRS?).

ILLUSTRATIONS. Habitus (Werner 2000a, colour figs 132, 132.1, 132.3); left elytron (Horn 1940, pl. 18, fig. 10); elytra, labrum, aedeagus (Cassola 1975, p. 197, fig. 7); aedeagus (Cassola, this paper, fig. 28); live specimens (Werner 2000a, colour figs 132.2, 132.5; Cassola, this paper, colour fig. 156); habitat (Werner 2000a, fig. 132.4).

DISTRIBUTION. South Africa. Transvaal: S. Dorset (TMSA). Rietfontein (TMSA). Weltvreden (TMSA). Zusters (FCC). Free State: Parys (Péringuey 1893). North-West: Molopo (MRAC); Vryburg (MRAC); Delarey (FCC, TMSA); Lichtenburg (TMSA); Potchefstroom (Wallengren 1881, Péringuey 1893; TMSA); Rustenburg (NCI); Brits, 18 km ESE [25°42S-27°53E] (DLPC); Melodie [25°44S-22°51E] (DLPC); Lindequesdrift [26°45S-27°34E] (TMSA); Rust-de-winter (TMSA); Magaliesberg (Boheman 1848). Gauteng: Johannesburg (TMSA); Pretoria (FCC, MRAC, TMSA); Walhalla [=Valhalla, suburb of Pretoria?] (TMSA); "Salt Pan, Pta. Distr." (MRAC); Zoutpan [25°24S-28°06E] (TMSA); Moloto (Werner 2000a; FCC, KWC); 20 km S Moloto (FCC, KWC). Northern Province: Thabazimbi (Werner 2000); Warmbaths-Thabazimbi (FCC, KWC); 8 km N Warmbaths (PSC); W of Warmbaths [24°55S-28°22E] (DWBC); Waterberg (TMSA); Waterberg nr Potgietersaus [24°18S-28°50E] (FCC); Rooiberg (TMSA); Nylstroom (TMSA); 10 km NE Nylstroom (PSC); Nylstroom-Vaalwater (Cassola 1975; FCC); Matlala (TMSA); Pietersburg (TMSA, NCI); 2 km S Pietersburg (PSC); Luipershoek Farm nr Roossenekal [25°07S-29°50E] (FCC, NCI); 12 km NW Melkrivier [23.56S-28.20E] (NCI). Mpumalanga: Lydenburg (FCC, NCI, TMSA); 14 km N Lydenburg (KWC); Wolkberg nr Haenertsburg (TMSA); "Salt Pan, Pta. Dist." [25°30-28°15, nr Pretoria] (MRAC). KwaZulu/Natal: Loskop (TMSA). Mozambique. Maputo: Magude (TMSA).

GERSTAECKERI W. HORN, 1898

Myrmecoptera Gerstaeckeri Horn, 1898a: 347.

Cicindela Gerstaeckeri; Horn 1926a: 156.

Euryarthron Gerstaeckeri; Rivalier 1957: 317.

Euryarthron gerstaeckeri; Wiesner 1992: 60, Werner 2000a: 92.

TYPE LOCALITY. "Nyassa".

Type specimen. "1 ♂" (DEI!).

GIBBICOLLIS W. Horn, 1913

Dromica gibbicollis Horn, 1913: 274.

Dromica gibbicollis, XVIII. Gruppe "gibbicollis"; Horn 1926a: 95.

Dromica gibbicollis; Wiesner 1992: 68, Werner 2000a: 185.

Type Locality. "Élisabethville (Miss. Agric. Leplae)".

Type specimens. "1 $\Im \Im$ ": 1 \Im (MRAC!), 1 \Im (DEI!).

ILLUSTRATIONS. Habitus (Horn 1940, pl. 16, figs 1, 2; Werner 2000a, colour fig. 188).

DISTRIBUTION. D. R. Congo. Shaba: Elisabethville [=Lubumbashi] (Horn 1913, 1929a; Burgeon

CASSOLA

1937; Werner 2000a; DEI, MRAC); Lubumbashi (FCC, JWC, MRAC).

GIGANTEA Brême, 1844

Dromica gigantea Brême, 1844: 289.

Dromica gigantea; Chaudoir 1864: 7, Fleutiaux 1892: 34.

Junior synonym of *Dromica clathrata*; Horn 1900a: 210; Horn 1926a: 86, Wiesner 1992: 62, Werner 2000a: 105.

Junior synonym of *Pseudodromica clathrata* (comb. n.).

Type locality. "...se trouve au Port-Natal".

Type specimen. Female (Brême 1844, pl. VII, fig. 3; MNHN?).

REMARKS. Synonymy with *clathrata* is given here just based on Horn's authority (1910b, 1926a). Chaudoir (1864) had excluded conspecificity ("Elle a été méconnue par Boheman, qui l'a confondue avec la *clathrata* Klug, espèce bien distincte et beaucoup plus petite"), but a female specimen in the historical collection of Massimiliano Spinola (MRSN; Giachino 1982), coming from the Melly's collection and labelled "Afrique int. S.E.", turned out to be a *clathrata* specimen.

GILVIPES Boheman, 1848

Cosmema gilvipes Boheman, 1848: 25.

Cosmema gilvipes; Fleutiaux 1892: 37.

Dromica gilvipes, XV. Gruppe "transitoria-auropunctata-elegantula"; Horn 1926a: 94.

Dromica gilvipes; Wiesner 1992: 68, Werner 2000a: 179.

Type locality. "Habitat in Caffraria interiore".

Type specimen. "♀" (NHRS?).

ILLUSTRATIONS. Habitus (Werner 2000a, colour figs 176, 176.1); left elytron (Horn 1940, pl. 18, fig. 14).

DISTRIBUTION. <u>South Africa</u>. *KwaZulu/Natal*: "du pays des Zoulous?" (Chaudoir 1864); Maritzburg (Péringuey 1893; NCI); Pietermaritzburg (Werner 2000a); Malvern (Werner 2000; BMNH, FCC, MRAC); Port Natal (BMNH); Bellair (TMSA); Wartburg (FCC, PSC).

GLOBICOLLIS W. Horn, 1914

Dromica (Myrmecoptera) Schaumi subsp. globicollis Horn, 1914a: 10.

Dromica Schaumi globicollis, V. Gruppe "Bennigseni-egregia"; Horn 1926a: 89.

Dromica schaumi globicollis; Wiesner 1992: 64, Werner 2000a: 132.

Dromica globicollis (**b. sp.**).

Type Locality. "Kigonsera (Deutsch Ostafrika: Ertl)".

Type specimens. "2 ♀♀♂♂" (DEI!).

ILLUSTRATIONS. Habitus (Werner 2000a, colour figs 98c, 98c.1); pronotum (Horn 1940, pl. 16, fig. 6). DISTRIBUTION. <u>Tanzania</u>. *Ruvuma*: Kigonsera (Horn 1914a; Werner 2000a; DEI, FCC, FMNH, MRAC).

REMARKS. Pronotal colour and shape, and moreover the apparant overlapping of geographical ranges, would suggest *globicollis* to deserve full specific status. Together with *cupricollis* and the co-occurring carabid beetle *Eccoptoptera cupricollis* Chd., *globicollis* is obviously a mymic of a female mutillid wasp.

GLORIOSA Péringuey, 1896

Cosmema gloriosa Péringuey, 1896: 113.

Dromica gloriosa, XV. Gruppe "transitoria-auropunctata-elegantula"; Horn 1926a: 93.

Dromica gloriosa; Wiesner 1992: 66, Werner 2000a: 163.

Type locality. "Zambesia (Buluwayo)".

Type specimen. Female ("Male unknown"; ZMB?).

DISTRIBUTION. Zimbabwe. Matabeleland North: Bulawayo (Péringuey 1896). Botswana (Werner 2000a).

Remarks. Péringuey's description would suggest conspecificity with *laticollis*, described from Transvaal. However, depository of type specimens is neither in SAM (Cochrane 1995) nor in DEI (Döbler 1973), and it is unknown. If synonymy should be confirmed, Péringuey's name would have priority. The specimen figured by Werner (2000a, colour fig. 146), from Klaserie, Northern Province, South Africa, would seem to rather be in the *consimilis* group.

GRACILIS W. Horn, 1909

Dromica (Cosmema) gracilis Horn, 1909d: 101.

Dromica gracilis, XV. Gruppe "transitoria-auropunctata-elegantula"; Horn 1926a: 94.

Dromica gracilis; Cassola 1986b: 347, Wiesner 1992: 67, Werner 2000a: 171.

Foveodromica gracilis (comb. n.).

Type-species of the genus Foveodromica nov..

Type locality. "S.O.-Katanga, Serenje District (N.O.-Rhodesia)".

Type specimens. Number not given, but both sexes included: 1 ♀ (DEI!).

ILLUSTRATIONS. Habitus (Werner 2000a, colour figs 156, 156.1, 156.2); aedeagus (Cassola 1986b, p. 351, fig. 4A).

DISTRIBUTION. <u>D. R. Congo</u>. *Shaba*: "S.O. Katanga" (Horn 1909d); Elisabethville [=Lubumbashi] (Cassola 1986b; ABC, JPC, JWC, MRAC); Jadotville [=Likasi] (Cassola 1986b; ABC, JPC, MRAC); Zilo (Cassola 1986b; Werner 2000a; ABC, JPC, MRAC); Kifumwanshi (Cassola 1986b; Werner 2000a; MRAC). <u>Zambia</u>. *Central*: Serenje distr. (Horn 1909d; DEI). <u>Tanzania</u>. *Mbeya*: Vwawa (Werner 2000a; KWC).

REMARKS. Wiesner (1992) recorded this species from Zimbabwe as well. However, the type locality ("Serenje District") clearly refers to present-day Zambia instead.

GRANDIS Péringuey, 1893

Dromica grandis Péringuey, 1893: 75.

Dromica grandis, IV. Gruppe "clathrata-Mauchi"; Horn 1926a: 86.

Dromica grandis; Wiesner 1992: 62, Werner 2000a: 107.

Pseudodromica grandis (comb. n.).

Type locality. "Middle Limpopo (Fort Tuli), Transvaal (Barberton)".

Type specimens. Number not given, but both sexes included; 1 \(\text{SAM!}, \text{labelled "Mashunaland,} \) Salisbury", but quoted as being the holotype by Cochrane 1995: 273).

ILLUSTRATIONS. Habitus (Horn 1940, pl. 11, fig. 1; Werner 2000a, colour figs75, 75.1); aedeagus (Cassola, this paper, fig. 123).

DISTRIBUTION. Zimbabwe. Mashonaland West?: Mashunaland (Werner 2000a; SAM). Mashonaland

CASSOLA

East: Salisbury [=Harare] (Cochrane 1995). Matabeleland South: Fort Tuli [=Thuli] (Péringuey 1893). <u>Botswana</u>. Kalahari Desert (Werner 2000a; DEI). <u>South Africa</u>. Eastern Transvaal: Barberton (Péringuey 1893).

REMARKS. Péringuey (1893) indicated "Fort Tuli" (in Matabeleland South) as the species' type locality, but his description clearly refers to both sexes, thus to two specimens at least. Actually the type specimen in SAM is labelled "Mashuanaland", therefore likely being the species' allotype (Werner 2000a). Identification of the Barberton specimens appears to be doubtful and would deserve confirmation.

GRANULATA Dokhtouroff, 1883

Dromica granulata Dokhtouroff, 1883: 9.

Cosmema granulata; Fleutiaux 1892: 36, Péringuey 1893: 94.

Junior synonym of *Dromica aspera* Dokhtouroff; Horn 1926a: 91, Wiesner 1992: 65, Werner 2000a: 151.

Dromica granulata (revised status).

Type locality. "Cafrerie (?). Ma collection".

Type specimens. Number and sex not given: 1 \, "syntype" (DEI!: Döbler 1973: 382).

ILLUSTRATIONS. Left elytron (Horn 1940, pl. 18, figs 7-9) (?); aedeagus (Cassola, this paper, fig. 67). DISTRIBUTION. Namibia. *Erongo*?: Damaraland (Péringuey 1893). South Africa. "?Caffraria" (Dokhtouroff 1883; Péringuey 1893). Torrance (TMSA). *Gauteng*: Hammanskraal (FCC). *Northern Province*: Pietersburg (TMSA); Zoutpan (TMSA, FCC); Pienaars River, 8 km S [25°17S-28°17E] (TMSA); Chapudi [22°55S-29°34E] (TMSA). *Mpumalanga*: Crocodile-poort East (TMSA). *KwaZulu/Natal*: Durban (Péringuey 1893; CMNH).

REMARKS. A much finer pronotal sculpture, foliated antennae, different elytral sculpture, and lack of continuous elytral marginal band (a short subapical lunule is usually left at most) seem to separe what I think to be *granulata* from both *aspera* and *foveolata*. Shape of male aedeagus shows these species, as well as *lateralis* Boheman and may be the *marginella*-group, to be closely related.

GROSSULA W. Horn, 1914

Dromica (Cosmema) grossula Horn, 1914a: 12.

Dromica grossula, XV. Gruppe "transitoria-auropunctata-elegantula"; Horn 1926a: 94.

Dromica grossula; Wiesner 1992: 67, Werner 2000a: 177.

Foveodromica grossula (comb. n.).

Type locality. "Angola (ex coll. V. Plason)".

Type specimens. "2 99, 33": 233, 19 (DEI!).

ILLUSTRATIONS. Habitus (Werner 2000a, colour fig. 170); aedeagus (Cassola, this paper, fig. 113).

DISTRIBUTION. <u>Angola</u>. Angola (Horn 1914a; DEI). *Benguela*: Ganda (Horn 1935b; Ferreira 1965). *Huila*: Caconda (Werner 2000a; MRAC).

REMARKS. Just the four type specimens and two more female specimens (from Ganda and Caconda) are apparently known so far (Horn 1914, 1935b; Cassola 1980a; Werner 2000a).

GRUTII Chaudoir, 1865

Dromica Grutii Chaudoir, 1865: 52.

Cosmema Gruti; Fleutiaux 1892: 36

Dromica Gruti, XV. Gruppe "transitoria-auropunctata-elegantula"; Horn 1926a: 94.

Dromica gruti; Wiesner 1992: 67, Werner 2000a: 178.

Type locality. "... de Port Natal".

Type specimen. "Mâle " (MNHN).

ILLUSTRATIONS. Habitus (Werner 2000a, colour fig. 174); left elytron (Horn 1940, pl. 20, fig. 7).

DISTRIBUTION. ?Namibia. "Damara" (FCC). South Africa. Mpumalanga: Stentor Estates nr Kaapmuiden (FCC). KwaZulu-Natal: "Natal" (MRAC); Port Natal (Chaudoir 1865); Pongola (Werner 2000a; KWC); 20 km W Magudu (PSC); False Bay (FCC, KWC); Mkuzi GR: Mantuma Camp [27°36S-32°13E] (DWBC); Hluhluwe GR: 5 km S Hilltop Camp [28°08S-32°06E] (DWBC); False Bay Park (FCC, PSC). Mozambique: Maputo: Lourenço-Marques [=Maputo] (MRAC); Rikatla (Junod 1899); env. Boane (FCC, SBC); 20 km S Boane (SBC).

REMARKS. Very few specimens are known so far. Horn (1935a) first considered *semilevis* to be a subspecies of *grutii*, but later (Horn 1940) considered them to be two separate species. Occurrence of this species in Namibia is doubtful and it would need to be confirmed.

GRUTI Péringuey, 1893

Cosmema Gruti Péringuey 1893: 86.

Cosmema gruti; Péringuey 1898: 308 ("C. gruti, Chaud., is different from C. gruti, Pér.").

Junior synonym of *Dromica sexmaculata*; Horn 1926a: 94.

Dromica sexmaculata var. Gruti; Horn 1940: 276.

Junior synonym of *Dromica sexmaculata*; Wiesner 1992: 68, Werner 2000a: 182.

ILLUSTRATIONS. Left elytron (Horn 1940, pl. 23, fig. 6).

GUNNINGI Péringuey, 1898

Myrmecoptera gunningi Péringuey, 1898: 312.

Dromica Gunningi, IV. Gruppe "clathrata-Mauchi"; Horn 1926a: 86.

Dromica gunningi; Wiesner 1992: 62, Werner 2000a: 108.

Pseudodromica gunningi (comb. n.).

Type Locality. "Transvaal (Barberton, Leydenburg)".

ILLUSTRATIONS. Habitus (Werner 2000a, colour figs 77, 77.1, 77a, 77a.1); left elytron (Horn 1940, pl. 21, fig. 8); aedeagus (Cassola, this paper, fig. 119).

DISTRIBUTION. South Africa. Transvaal (FCC). Grootdrai (TMSA). Koodoos River (FCC, TMSA). Northern Province: Griffin Mine [nr Leydsdorp, 23°59S-30°31E] (FCC, TMSA); Tricharsdal [24°10S-30°24E] (NCI); 2 km E Klaserie [24°31S-31°02E] (DWBC); 2 km NE Klaserie [24°32S-31°02E] (DWBC); Shilouvane nr Leydsdorp (FCC, MRAC, NCI, TMSA); Zoutpansberg (FCC, MRAC); Thabina (FCC, TMSA); Ofcolaco: Makhutswe River (Werner 2000a; KWC, JWC); 15 km E Klaserie: Guernsey Farm (ACBRI). Mpumalanga: Barberton (Péringuey 1898; DEI, FCC); Lydenburg (Péringuey 1898; DEI, FCC, TMSA); Komatipoort (Horn 1900a, sub Myrmecoptera micans; Werner 2000a); Pretoriuskop (HFHC). Mozambique. Maputo: Lourenço Marques [=Maputo]: Naamacha (MRAC).

CASSOLA CASSOLA

HAMATA Péringuey, 1893

Cosmema hamata Péringuey, 1893: 92.

Junior synonym of Dromica coarctata; Horn 1926a: 92, Wiesner 1992: 66, Werner 2000a: 157.

TYPE LOCALITY. "Cape Colony (Sunday River)".

TYPE SPECIMENS. Number not given, but both sexes included; 2 syntypes (DEI!; Döbler 1973: 383). ILLUSTRATIONS. Left elytron (Horn 1922, fig. 6).

HAMMONDI Cassola, 1980

Dromica serietuberculata subsp. hammondi Cassola, 1980: 693.

Dromica serietuberculata hammondi; Wiesner 1992: 67, Werner 2000a: 168.

TYPE LOCALITY. "N.W. Rhodesia, Tayumba, Solwezi distr.".

Type specimens. Holotype ♂ (BMNH!); allotype ♀ (BMNH!); 1 ♂ (BMNH!); 1 ♂ (FCC!).

ILLUSTRATIONS. Habitus (Werner 2000a, colour fig. 152b).

HELLERI W. Horn, 1897

Cosmema Helleri Horn, 1897b: 237.

Dromica Helleri, XVI. Gruppe "sexmaculata-Helleri"; Horn 1926a: 95.

Dromica helleri; Wiesner 1992: 68, Werner 2000a: 185.

TYPE LOCALITY. "Transvaal".

Type specimen. "1 ♀" (DEI!).

ILLUSTRATIONS. Habitus (Werner 2000a, colour figs 187, 187.1); left elytron (Horn 1940, pl. 23, fig. 8); aedeagus (Cassola, this paper, fig. 41).

DISTRIBUTION. <u>South Africa</u>. "Transvaal" (Horn 1897b; Péringuey 1898). *Mpumalanga*: Komatipoort (Horn 1897c; DEI); Kaapmuiden (DEUP); White River (FCC). *Northern Province*: "Limpopo, oberhalb Shengane" (DEI); Griffin Mine [nr Leydsdorp, 23°59S-30°31E] (Werner 2000a; FCC, TMSA). *KwaZulu/Natal*: Ndumu (Werner 2000a; FCC, TMSA). <u>Swaziland</u>. Mkhaya NR (FCC); Maphiveni: Mlawula NR (Wiesner 2001). <u>Mozambique</u>. *Maputo*: Delagoa Bay [=Maputo] (DEI, MRAC); env. Boane (SBC).

HEXASTICTA Fairmaire, 1887

Dromica hexasticta Fairmaire, 1887: 71.

Cosmema hexastica (sic!); Fleutiaux 1892: 36

Cosmema quadriguttata var. hexasticta; Horn 1896a: 59.

Cicindela hexasticta; Horn 1926a: 155.

Bennigsenium hexastictum; Wiesner 1992: 95, Werner 2000b: 17.

Type locality. "... dans l'intérieur du Zanguebar ... Uzagara".

Type specimen. "♀" (MNHN?).

ILLUSTRATIONS. Habitus (Horn 1915, pl. 16, fig. 8, colour illustration; Werner 2000b, colour figs 192.1, 192.2); left elytron (Horn 1938, pl. 44, fig. 18); meso- and metepisterna (Horn 1915, pl. 15, fig. 207); aedeagus (Cassola, this paper, fig. 106).

REMARKS. The taxonomic place of this species is still unclear. Together with two closely allied species, "Cicindela" cosmemoides W. Horn, 1913, and allardiana, it should probably be isolated in a separate genus, other than Dromica and Bennigsenium.

HILDEBRANDTI W. Horn, 1903

Dromica (Myrmecoptera) Hildebrandti Horn, 1903c: 421.

Dromica Hildebrandti, IV. Gruppe "clathrata-Mauchi", Untergruppe "Bertolonii-nobilitata"; Horn 1926a: 87.

Dromica hildebrandti; Wiesner 1992: 63, Werner 2000a: 115.

Type Locality. "Africa Orientalis Britannica".

Type specimen. "1 9" (DEI!).

ILLUSTRATIONS. Habitus (Werner 2000a, colour figs 83, 83.1).

DISTRIBUTION. <u>Kenya</u>. "Africa Orientalis Britannica" (Horn 1903c; Werner 2000a; DEI). *Rift Valley*: Magadi (Werner 2000a; FCC, NMN). *Nairobi*: "Wa-Kikuyu, Bassin de 1'Athi" (MRAC); Stony Athi (BMNH, NMN).

HOLUBI C.A. Dohrn, 1881

Dromica (Myrmecoptera) Holubi Dohrn, 1881: 318.

Myrmecoptera Holubi; Fleutiaux 1892: 36.

Junior synonym of *Dromica polyhirmoides*; Horn 1926a: 87, Basilewsky 1957: 466, Wiesner 1992: 62, Werner 2000a: 109.

Junior synonym of *Pseudodromica polyhirmoides* (comb. n.).

Type Locality. "Südlichen Afrika".

Type specimen. Holotype & (PASW; Basilewsky 1957).

HORII Cassola, 1986

Dromica horii Cassola, 1986: 350.

Dromica horii; Wiesner 1992: 67, Werner 2000a: 174.

Foveodromica horii (comb. n.).

Type locality. "Tanzania: Kigoma, Mahale Mountains National Park, Myako".

Type specimens. Holotype \Im (FCC!); allotype \Im (FCC!); 1 \Im (BMNH!); 1 \Im (DEI!); 2 \Im \Im (FCC!); 7 \Im \Im , 5 \Im \Im (MHC!); 1 \Im , 1 \Im (MRAC!).

ILLUSTRATIONS. Habitus (Cassola 1986b, fig. 5; Werner 2000a, colour fig. 161.1); aedeagus (Cassola 1986, p. 351, fig. 4E).

DISTRIBUTION. <u>Tanzania</u>. *Kigoma*: Kigoma (FCC); Mahale Mts. NP: Myako (Cassola 1986b; Werner 2000a; BMNH, DEI, JWC, MHC, MRAC).

REMARKS. The female specimen from Sibweza, Tanzania, pictured by Werner (2000a, fig. 161) under "horii", should be in reality *F. profugorum*.

HORNI W. Horn, 1940

Nomen nudum.

Dromica Horni Péringuey i.l. Horn, 1940: 272.

Dromica horni; Wiesner 1992: 64.

Junior synonym of Dromica quadricostata; Werner 2000a: 119.

Type locality. Unknown.

Type specimens. "3 ex. ohne Fundort...Typen" (DEI!).

ILLUSTRATIONS. Habitus (Werner 2000a, fig. 90, sub D. costata?); left elytron (Horn 1940, pl. 18,

CASSOLA CASSOLA

fig. 12).

HUMERALIS W. Horn, 1913

Dromica (Cosmema) humeralis Horn, 1913: 277.

Dromica humeralis, XV. Gruppe "transitoria-auropunctata-elegantula"; Horn 1926a: 94.

Dromica humeralis; Wiesner 1992: 67, Werner 2000a: 174.

Foveodromica humeralis (comb. n.).

Type locality. "Bailundo (Angola)".

ILLUSTRATIONS. Habitus (Werner 2000a, colour fig. 162); aedeagus (Cassola, this paper, fig. 109).

DISTRIBUTION. Angola. Huambo: Bailundo (Horn 1913; Ferreira 1965; Werner 2000a; DEI).

REMARKS. Just the two type specimens are apparently known so far (Cassola 1980a), but Werner (2000a) recently figured a male specimen in his collection also labelled "Ballundo".

IMMACULATA Péringuey, 1888

Dromica immaculata Péringuey, 1888: 70.

Dromica immaculata; Péringuey 1893: 81, Fleutiaux 1892: 35.

"Inorn-F" of Dromica tuberculata, III. Gruppe "bicostata-octocostata"; Horn 1926a: 85.

Junior synonym of Dromica tuberculata; Wiesner 1992: 61, Werner 2000a: 101.

Junior synonym of *Pseudodromica tuberculata carinulata* (comb. n.).

TYPE LOCALITY. "Captured near Graham's Town, Cape Colony".

Type specimen. "... only seen the female" (ZMB?).

ILLUSTRATIONS. Habitus (Péringuey 1893, pl. 2, fig. 7).

INCRASSATA W. Horn, 1909

Dromica (Cosmema) incrassata Horn, 1909a: 90.

Dromica lepida incrassata, XIV. Gruppe "lepida"; Horn 1926a: 93.

Junior synonym of Dromica lepida; Horn 1935a: 101.

Dromica lepida incrassata; Wiesner 1992: 66, Werner 2000a: 160.

Junior synonym of *Dromica lepida* (see discussion under *lepida*).

Type locality. "Südafrika".

Type specimen. "1 ?" (DEI!); not listed by Döbler (1973).

ILLUSTRATIONS. Habitus (Werner 2000a, fig. 140a).

INTERMEDIA W. Horn, 1892

Cosmema intermedia Horn, 1892a: 68.

Cosmema intermedia; Fleutiaux 1892: 36

Junior synonym of Cosmema elegantula; Péringuey 1896: 97.

Junior synonym of *Dromica elegantula*; Horn 1926a: 94, Wiesner 1992: 68, Werner 2000a: 179.

Type locality. "Caffraria".

Type specimen. "♀" (DEI!).

INTERMEDIOPUNCTATA W. Horn, 1929

Dromica gracilis intermedio-punctata Horn, 1929a: 315.

Dromica intermediopunctata; Cassola 1986: 349.

Dromica intermediopunctata; Wiesner 1992: 67, Werner 2000a: 171.

Foveodromica intermediopunctata (comb. n.).

Type locality. "Kigonsera, NO-Nyassa-See".

Type specimens. "3 99,13" (DEI!).

ILLUSTRATIONS. Habitus (Werner 2000a, colour figs 157, 157.1, 157.2); aedeagus (Cassola 1986b, fig. 4B); habitat (Werner 2000a, figs 157.3, 157.4).

DISTRIBUTION. <u>D. R. Congo</u>. *Shaba*: Lubumbashi (Cassola 1986b; MRAC); Kapoya (Cassola 1986b; MRAC); Tekanini (Cassola 1986b; MRAC); Jadotville [=Likasi] (Cassola 1986b; MRAC, FCC); Mura (Cassola 1986b; MRAC, FCC). <u>Zambia</u>. *Northern*: Abercorn [=Mbala] (FCC, IRSNB). <u>Malawi</u>. Nkwadzi (Cassola 1986b; MRAC). *North*: Misuku Hills (KWC). *Central*: Chisasira: Chinteche (Cassola 1986b; FCC, MRAC). *South*: Limbe (Werner & Dudley 1998). <u>Tanzania</u>. *Iringa*: Mafinga (MSNC). *Dodoma*: Mitundo (KWC). *Ruvuma*: Kigonsera (Horn 1929a; Werner 2000a; DEI); Songea (Werner 2000a; KWC).

INTERRUPTA Klug, 1834

Dromica interrupta Klug, 1834: 40.

Junior synonym of *Dromica trinotata*; Chaudoir 1864: 73.

Junior synonym of Cosmema trinotata; Fleutiaux 1892: 37.

Junior synonym of Cosmema tri-notata; Péringuey 1893: 84.

Junior synonym of Dromica trinotata; Horn 1926a: 85, Wiesner 1992: 61, Werner 2000: 98.

Type Locality. Not indicated.

Type specimens. "Nur nach dem weißlichen Geschlecht bekannt" (ZMB?).

INTERRUPTEMACULATA W. Horn, 1923

Dromica (Myrmecoptera) nobilitata subsp. interrupte-maculata Horn, 1923: 316.

Dromica nobilitata interrupte-maculata, IV. Gruppe "clathrata-Mauchi", Untergruppe "Bertolonii-nobilitata"; Horn 1926a: 88.

Dromica nobilitata interruptemaculata; Wiesner 1992: 63, Werner 2000a: 122.

Type locality. "Brit. Ost-Afrika (Kibwezi, G. Scheffler)".

Type specimens. Number not given, but both sexes included: $1 \, 3$, $2 \, 9 \, 9$ (DEI!).

ILLUSTRATIONS. Habitus (Werner 2000a, colour figs 91b, 91b.1); left elytron (Horn 1940, pl. 17, fig. 5).

INVICTA Péringuey, 1894

Myrmecoptera invicta Péringuey, 1894: 452.

Dromica invicta, IV. Gruppe "clathrata-Mauchi"; Horn 1926a: 87.

Dromica invicta; Wiesner 1992: 62, Werner 2000a: 112.

Pseudodromica invicta (comb. n.).

Type Locality. "Mashunaland (Salisbury)".

Type specimens. Number not given, but both sexes included: 3 syntypes (DEI!); 1 & (MRAC!).

ILLUSTRATIONS. Habitus (Werner 2000a, colour figs 81, 81.1); elytra (Horn 1927, figs 41, 42); left

CASSOLA

elytron (Horn 1940, pl. 22, figs 1, 2); aedeagus (Cassola, this paper, fig. 124).

DISTRIBUTION. Zimbabwe. *Mashonaland East*: Salisbury [=Harare] (Péringuey 1894, 1896; Werner 2000a; ABC, CAS, CMNH, FCC, MRAC, NCI, TMSA). *Midlands*: Chivhu (FCC); Sebakwe (NCI, TMSA). *Matabeleland*: Hrd af Seg (MRAC).

REMARKS. As to the supposed ssp. *neavei*, described by Horn (1913) from N.E. Zambia, it is here considered to be a distinct full species (see below).

IRREGULARIS W. Horn, 1904

Myrmecoptera polyhirmoides subsp. irregularis Horn, 1904a: 91.

Dromica polyhirmoides irregularis, IV. Gruppe "clathrata-Mauchi"; Horn 1926a: 87.

Dromica polyhirmoides irregularis; Wiesner 1992: 62, Werner 2000a: 111.

Junior synonym of *Pseudodromica polyhirmoides* (syn. n.).

Type locality. "Mashona.Land".

Type specimen. "1 ♀" (DEI!).

ILLUSTRATIONS. Habitus (Werner 2000a, colour fig. 79c).

REMARKS. Until better information this form is herein considered to be merely a junior synonym of *polyhirmoides*.

JORDANI W. Horn, 1899

Myrmecoptera Jordani Horn, 1899b: 53.

Junior synonym of Dromica egregia tarsalis; Horn 1926a: 88, Wiesner 1992: 63, Werner 2000a: 125.

Type locality. "Lindi; Zomba, Upp. Shire R.".

Type specimens. "1 \eth , 2 \Im ": 1 \Im (DEI!); 1 \eth (MRAC!).

ILLUSTRATIONS. Left elytron (Horn 1940, pl. 17, fig. 12).

JUENGERI Cassola, 1985

Dromica juengeri Cassola, 1985: 33.

Dromica juengeri; Wiesner 1992: 67, Werner 2000a: 169.

Foveodromica juengeri (comb. n.).

Type locality. "Angola: Calulo".

Type specimens. Holotype $\mathcal{P}(JWC!)$; $1\mathcal{P}(FCC!)$; $1\mathcal{P}(MRAC!)$.

ILLUSTRATIONS. Habitus (Cassola 1985, fig. 1; Werner 2000a, colour fig. 154; Werner 2000a, colour fig. 172, sub *marginepunctata*?).

DISTRIBUTION. Angola. Cuanza Sul: Calulo [9°56S-14°49E] (Cassola 1985; Werner 2000a; FCC, JWC, MRAC).

REMARKS. There is another "Calulo" in the Cuando Cubando Province. Apart from the three female type specimens, no other specimens are known so far.

JUNODI Péringuey, 1892

Myrmecoptera Junodi Péringuey, 1892b: 95.

Dromica Junodi, VIII. Gruppe "Saundersi-Junodi"; Horn 1926a: 90.

Dromica junodi; Wiesner 1992: 64, Werner 2000a: 143.

Type locality. "Rikatla, twenty miles from Lourenço Marquez, Delagoa Bay".

Type specimens. Number not given, but both sexes included: $4 \ 3 \ 3 \ 9 \ 9 \ (DEI!)$.

ILLUSTRATIONS. Habitus (Junod 1899, pl. V, fig. 2; Werner 2000a, colour figs 117.1, 117.2, 117.3); aedeagus (Cassola, this paper, fig. 103).

DISTRIBUTION. <u>South Africa</u>. *Mpumalanga*: Low County (Werner 2000a; JPC, KWC, MCZR). <u>Mozambique</u>. *Maputo*: Rikatla (Péringuey 1892b, 1893; Péringuey 1893, sub *algoensis*; Junod 1899; DEI, MRAC, NCI); Delagoa Bay, Lourenço Marques [=Maputo] (Péringuey 1893; Werner 2000a; CMNH, DEI, FCC, JWC, MRAC, MHNG, NCI, TMSA); Tembé (Junod 1899, sub *Myrmecoptera algoensis*); Vila Luiza [=Marracuene, 25°44′13S-32°40′35E] (NMBSA); Marracuene (SBC).

Remarks. A male specimen from "Porto Henrique" (MRAC) is likely a different new species.

KANZENZENSIS Cassola, 1986

Dromica kanzenzensis Cassola, 1986: 345.

Dromica kanzenzensis; Wiesner 1992: 65, Werner 2000a: 148.

TYPE LOCALITY. "Shaba: Kanzenze, Zilo".

Type specimens. Holotype \Im (MRAC!); allotype \Im (MRAC!); 1 \Im (DEI!); 6 \Im \Im 7 \Im (FCC!); 1 \Im (KWC!); 1 \Im , 1 \Im (MRAC!); 1 \Im (PSC!); 1 \Im , 1 \Im (VAC!).

ILLUSTRATIONS. Habitus (Werner 2000a, colour figs 124, 124.1, 124a, 124a.1); aedeagus (Cassola, this paper, fig. 79).

DISTRIBUTION. <u>D. R. Congo</u>. *Shaba*: Kanzenze (Cassola 1986b; Werner 2000a; DEI, FCC, MRAC, VAC); Zilo (Cassola 1986b; DEI, FCC, MRAC, VAC); Kafakumba (IRSNB); Kasaji: Dilolo (Cassola 1986b, ssp. *labiosemiflava*; Werner 2000a; ABC, FCC, JWC, MRAC).

KAVANAUGHI Cassola, 1980

Dromica kavanaughi Cassola, 1980: 206.

Dromica kavanaughi; Wiesner 1992: 67, Werner 2000a: 176.

Type Locality. "Angola, 5 mi. E of Vila Arriaga".

Type specimen. Holotype δ (CAS!).

ILLUSTRATIONS. Habitus, labrum, aedeagus (Cassola 1980a, fig. 2); habitus (Werner 2000a, fig. 168, colour picture of holotype).

DISTRIBUTION. <u>Angola</u>. *Namibe*: 5 mi E Vila Arriaga [=Bibala, 52 km NW Lubango] (Cassola 1980a; Werner 2000a; CAS).

REMARKS. The single male holotype specimen only is known so far.

KEHMINI Werner, 1999

Dromica coarctata kehmiini Werner, 1999: 16.

Substitution name for *D. coarctata aspera* Péringuey, 1896, nec Chaudoir in Dokhtouroff, 1883.

Dromica coarctata kehmiini; Werner 2000a: 158.

Junior synonym of *Dromica coarctata* (syn. n.).

ILLUSTRATIONS. Habitus (Werner 2000a, fig. 138b, colour picture).

REMARKS. Separation of *aspera* Péringuey, 1896 (nec Chaudoir in Dokhtouroff, 1883), from *coarctata*, is still unclear and not verified, what would seem to prevent *kehmiini* (substitution name), for the time being at least, from being given a subspecific status. Examination of Péringuey's type specimens and more material from the very same area are definitely needed.

70 Cassola

KENYANA Werner, 1993

Dromica kenyana Werner, 1993a: 59.

Dromica kenyana; Werner 2000a: 115.

Type locality. "Kenya: Arabuko-Sokoke Forest, Malindi, Lower Tana-Sabaki".

Type specimens. Holotype \Im (KWC); allotype \Im (KWC); 1 \Im , 1 \Im (FCC!); 1 \Im (KWC).

Illustrations. Habitus, labrum, aedeagus (Werner 1993a, figs 2, 4, 7, 9); habitus (Werner 2000a, colour figs 84, 84.1); aedeagus (Cassola, this paper, fig. 82); live specimen (Cassola, this paper, colour fig. 153); habitat (Cassola, this paper, fig. 152).

DISTRIBUTION. <u>Kenya</u>. *Coast*: Jilore Forest, lower Tana-Sabaki (Werner 1993a; Werner 2000a; DEI, FCC, KWC); Arabuko-Sokoke FR (Werner 1993a; Werner 2000a; DEI, FCC, JWC); Kififi: Marafa (MZSF); Malindi (Werner 1993a; DEI, FCC, KWC, MZSF).

REMARKS. Relationship of *kenyana* within the complex of *nobilitata* (including its supposed subspecies *reducta* and *interruptemaculata*) should be reviewed. Diagnostic characters and respective distributions are not fully clear.

KOLBEI W. Horn, 1897

Cosmema Kolbei Horn, 1897b: 238.

Dromica Kolbei, XVI. Gruppe "sexmaculata-Helleri"; Horn 1926a: 95.

Dromica kolbei; Wiesner 1992: 68, Werner 2000a: 184.

Type locality. "1 ♀♂; Mp'hôme (Transvaal)...; 1 ♀ Huilla".

Type specimens. 1 \eth , 1 \heartsuit (ZMB); 1 \heartsuit (DEI!; Döbler 1973).

ILLUSTRATIONS. Habitus (Horn 1910b, pl. 11, fig. 2, colour illustration; Werner 2000a, colour figs 186, 186.1, 186.2); left elytron (Horn 1940, pl. 18, fig. 18); aedeagus (Cassola, this paper, figs 40); live specimens (Werner 2000a, colour fig. 186.4; Cassola, this paper, colour figs 141, 142); habitat (Werner 2000a, fig. 186.3).

DISTRIBUTION. <u>Angola?</u>. *Huila*: Huilla (Horn 1897b; Péringuey 1898; Cassola 1980b; DEI). <u>Zimbabwe</u>. *Masvingo*: Fort Victoria [=Masvingo] (Cassola 1980a; AEUT, FCC). <u>South Africa</u>. Koedoes River (TMSA); Mp'hôme (Horn 1897b; Péringuey 1898). *North-West*: Rustenburg NR [25°40S-27°12E] (NCI). *Northern Province*: Griffin Mine [nr Leydsdorp, 23°59S-30°31E] (FCC, TMSA); Klaserie (Werner 2000a); Shilouvane nr Leydsdorp (DEI, FCC, MHNG, MRAC, TMSA); Zoutpansberg: Thabina (TMSA); Leydsdorp (TMSA); Ofcolaco: Makhutswe River (Werner 2000a; FCC, JPC, JWC); 63 km S Tzaneen (TMSA); Hans Merensky NR [23°40S-30°39E] (Werner 2000a; FCC, NCI); Gravelotte (FCC, TMSA); 7.5 km E Gravelotte [23°55S-30°40E] (DWBC); Pietersburg: Malta (FCC); Luis Trichardt: Ben Lavin NR (PSC); Duiwelskloof (VAC); Phalaborwa (TMSA). *Mpumalanga*: Lydenburg (Péringuey 1898); Letsitele [23°53S-30°24E] (FCC, NCI); Kruger NP: Punda Maria (NCI). *KwaZulu/Natal*: Elandskraal Kloof (TMSA).

Remarks. The record from Angola is surprising and it should be confirmed.

LABIOSEMIFLAVA Cassola, 1986

Dromica kanzenzensis labiosemiflava Cassola, 1986: 346.

Dromica kanzenzensis labiosemiflava; Wiesner 1992: 65, Werner 2000a: 148.

TYPE LOCALITY. "Shaba: Dilolo".

Type specimens. Holotype \Im (MRAC!); allotype \Im (MRAC!); 1 \Im , 1 \Im (ABC!); 3 \Im \Im , 2 \Im

(FCC!); $1 \circ (JWC!)$; 5 paratypes (MRAC!).

ILLUSTRATIONS. Habitus (Werner 2000a, colour figs 124a, 124a.1).

LAETA Tatum, 1851

Myrmecoptera laeta Tatum, 1851: 51.

Myrmecoptera Revoili; Fleutiaux 1892: 35.

Junior synonym of Cicindela Revoili; Horn 1896b: 353, Horn 1926a: 155.

Junior synonym of Euryarthron revoili; Wiesner 1992: 60, Werner 2000a: 94.

TYPE LOCALITY. "Abyssinia".

Type specimens. 1 syntype (DEI!; Döbler 1973).

LATERALIS Boheman, 1860

Cosmema lateralis Boheman, 1860: 6.

Cosmema lateralis; Fleutiaux 1892: 37.

Dromica lateralis, XI. Gruppe "lateralis"; Horn 1926a: 92.

Dromica lateralis; Wiesner 1992: 65, Werner 2000a: 152.

Type locality. "Hab. prope lacum N'Gami mense Martii".

Type specimens. Number and sex not given (NHRS?).

ILLUSTRATIONS. Habitus (Werner & Wiesner 1994, fig. 24; Werner 2000a, colour fig. 131); aedeagus (Cassola, this paper, fig. 65); habitat (Werner 2000a, fig. 131.1).

DISTRIBUTION. Namibia. Khomas: Windhoek (Werner & Wiesner 1994; Werner 2000a; JPC, KWC); Richthofen [22°34S-17°45E] (Werner & Wiesner 1994; FCC, SMWN); Excelsior [22°27S-17°38E] (Werner & Wiesner 1994; FCC, SMWN). <u>Botswana</u>. *Ngami*: Ngami Lake (Boheman 1860, Werner 2000a). <u>South Africa</u>. *Northern Cape*: Kimberley (NCI); Hartswater (NCI).

REMARKS. The record by Péringuey (1893) from Kimberley, Northern Cape Province, should be referred to *aspera* (see Horn 1897d). However, *lateralis*, too, is apparently known from this same locality.

LATERALIS Péringuey, 1893

Cosmema lateralis Péringuey, 1893: 90.

Junior synonym of Cosmema aspera; Horn 1897d: 62.

Junior synonym of Dromica aspera; Horn 1926a: 91, Wiesner 1992: 65, Werner 2000a: 151.

Remarks. Synonymy with aspera was established by Horn (1897d): "Cosm. lateralis $\ \$ Pér. (aspera Chd. i.l., Pér.) ist = C. aspera $\ \$ D.". Péringuey (1898) consequently but incorrectly stated that the latter species should be named aspera Pér..

LATERODECLIVIS W. Horn, 1929

Dromica gracilis latero-declivis Horn, 1929a: 315.

Dromica laterodeclivis; Cassola 1986: 350.

Dromica laterodeclivis; Wiesner 1992: 67, Werner 2000a: 173.

Foveodromica laterodeclivis (comb. n.).

TYPE LOCALITY. "Upangwa, Deutsch-Ostafrika".

Type specimens. "2 ♀♀" (DEI!).

ILLUSTRATIONS. Habitus (Werner 2000a, colour fig. 160); aedeagus (Cassola 1986b, p. 351, fig. 4D).

DISTRIBUTION. <u>Tanzania</u>. *Ruvuma*: Upangwa [35°E-10°S] (Horn 1929a; DEI). <u>Malawi</u>. Mughese FR (Werner & Dudley 1998). *North*: Jembya NR [10°08S-33°27E] (CMNH, FCC); Jembya NR: 18 km SSE Chisenga (Werner 2000); Chisanga Falls, Chelinda (Cassola 1986b; MRAC); Chelinda-Rumphi (Cassola 1986b; FCC, MRAC). *Central*: Viphya Plateau (Werner & Dudley 1998). <u>Zambia</u>. *Northern*: Abercorn [=Mbala] (MRAC).

LATICOLLIS W. Horn, 1903

Dromica (forma intermedia inter Myrmecopteras et Cosmemas) laticollis Horn, 1903a: 318.

Dromica laticollis, X. Gruppe "laticollis-ramigera"; Horn 1926a: 91.

Dromica laticollis; Wiesner 1992: 65, Werner 2000a: 164.

Type locality. "Transvaal (Pietersburg: Donckier)".

Type specimens. " \cite{P} " (number not given): \cite{P} (DEI!), \cite{P} "cotype" (NCI!).

ILLUSTRATIONS. Habitus (Werner 2000a, colour figs 147, 147.1); left elytron (Horn 1940, pl. 18, fig. 4); aedeagus (Cassola, this paper, fig. 92); live specimens (Werner 2000a, colour fig. 147.2; Cassola, this paper, colour fig.137); habitat (Werner 2000a, figs 147.3, 186.3; Cassola, this paper, fig. 136). DISTRIBUTION. Zambia (new country record). Northern: Musombwe: Mweru-Wantipa NR (TMSA). Zimbabwe. Manicaland: Mt. Chirinda (TMSA). Masvingo: 4 km E Lundi-R. bridge [20°50S-31°05E] (FCC). Botswana. NW Botswana (Wiesner 1992). South Africa. Sikororo (TMSA); Koedoes River (TMSA). Northern Province: Pietersburg (Horn 1903a); Kruger NP: 20 km NE Shingwedzi (FCC); Ofcolaco: Makhutswe River (Werner 2000a; FCC, KWC); Leydsdorp (KWC, MRAC); Shilouvane nr Leydsdorp (FCC); Chilovane (FCC, TMSA); 22 km W Louis Trichardt (PSC); 7.5 km E Gravelotte [23°55S-30°40E] (DWBC); Griffin Mine [nr Leydsdorp, 23°59S-30°31E] (TMSA). KwaZulu/Natal: Ndumu (TMSA). Mozambique. "Mozambique" (MRAC). Maputo: Lourenço Marques [=Maputo] (FCC). Sofala: Beira (TMSA).

REMARKS. Relationship with *D. gloriosa*, described from Bulawayo (Zimbabwe) should be investigated. If a synonymy has to be established, Péringuey's name would have priority.

LEPIDA Boheman, 1848

Cosmema lepida Boheman, 1848: 23.

Cosmema lepida; Fleutiaux 1892: 37.

Dromica lepida, XIV. Gruppe "lepida"; Horn 1926a: 93.

Dromica lepida; Wiesner 1992: 66, Werner 2000a: 159.

Type locality. "Habitat in Caffraria interiore".

Type specimens. Number not given, but both sexes included (NHRS?).

ILLUSTRATIONS. Habitus (Werner 2000a, colour figs 140, 140.1, 140a); left elytron (Horn 1940, pl. 19, fig. 7); aedeagus (Cassola, this paper, fig. 42).

DISTRIBUTION. <u>Botswana</u> (Wiesner 1992). <u>South Africa</u>. Transvaal (NCI). Rooipl. (TMSA). *Free State*: Demetsdorp (Werner 2000a; FCC, HFHC, MRAC, TMSA); Bothaville (FCC, TMSA). *North-West*: Lichtenburg (TMSA); Swartruggens: Marico (FCC, TMSA); De la Rey (TMSA); Potchefstroom (Péringuey 1893; MRAC, TMSA). *Gauteng*: Johannesburg (FCC); Pretoria (TMSA); Rosslyn [=suburb of Pretoria] (TMSA); Krugersdorp (CMNH, FCC). *Northern Province*: Warmbath (Werner 2000a; KWC); Waterberg (TMSA); Molopa: Zebediela (TMSA); Pietersburg (MRAC, TMSA); Moorddrift [24°17S-28°58E] (FCC, TMSA); Nylsvley GR [24°39S-28°42E] (DWBC).

Mpumalanga: Lydenburg (TMSA). KwaZulu/Natal: "du pays des Zoulous" (Chaudoir 1864); Durban (CMNH, FCC); Loskop (FCC, TMSA); Hluhluwe NR (DLPC).

REMARKS. Horn (1909a) described a *D. incrassata*, based on a single female specimen just labelled "Südafrika", which he later considered to be a subspecies of *lepida* (Horn 1926), then a junior synonym of it (Horn 1935a). Until better information is reached, I follow here his later statement.

LEPIDULA W. Horn, 1903

Dromica (Cosmema) lepidula Horn, 1903a: 318.

Dromica lepidula, XIV. Gruppe "lepida", Untergruppe "tenella"; Horn 1926a: 93.

Dromica lepidula; Wiesner 1992: 66, Werner 2000: 161.

Type locality. "Transvaal (Pietersburg: Donckier)".

Type specimens. Number not given, but both sexes included: 2 ♂ ♂, 3 ♀♀ (DEI!).

ILLUSTRATIONS. Habitus (Werner 2000a, colour figs 142, 142.1, 142.2); left elytron (Horn 1940, pl. 20, fig. 1); aedeagus (Cassola, this paper, fig. 45); live specimens (Werner 2000a, colour fig. 142.3; Cassola, this paper, colour fig. 138); habitat (Werner 2000a, fig. 147.3; Cassola, this paper, fig. 136) DISTRIBUTION. Zimbabwe. Midlands: Sebakwe (NCI). South Africa. Transvaal (MRAC, NCI); Koedoes River (TMSA). Northern Province: Pietersburg (Horn 1903a; DEI); Shilouvane (DEI, FCC, MRAC, NCI, TMSA); Hans Merensky NR [23°42S-30°44E] (Werner 2000; CIC, FCC, NCI); Ellisras: D'Nyala NR [23°45S-27°49E] (NCI); Letsitele [23°53S-30°24E] (NCI); 7.5 km E Gravelotte [23°55S-30°40E] (DWBC); Leydsdorp (FCC, TMSA); Kruger NP: 20 km NE Shingwedzi (FCC); Kruger NP: Punda Maria at Mahonie Loop [22°40S-30°59.8E] (DWBC); Ofcolaco: Makhutswe River (Werner 2000a; KWC); Zoutpansberg (TMSA); Griffin Mine [nr Leydsdorp, 23°59S-30°31E] (TMSA). Mozambique. Maputo: Delagoa Bay [=Maputo] (MRAC).

LEROUXAE Cassola, this paper

Pseudodromica lerouxae Cassola, this paper

Type Locality. "South Africa (Northern Province): Luipershoek Farm, near Roossenekal".

Type specimen. Holotype & (NCI!).

ILLUSTRATIONS. Habitus, labrum, aedeagus (Cassola, this paper, figs 25-27).

DISTRIBUTION. <u>South Africa</u>. *Mpumalanga*: Luipershoek Farm, near Roossenekal [25°07S-29°50E] (NCI).

REMARKS. The single holotype male specimen is known so far.

LEYDENBURGIANA Péringuey, 1898

Cosmema leydenburgiana Péringuey, 1898: 309.

Dromica leydenburgiana, XIV. Gruppe "lepida"; Horn 1926a: 93.

Dromica leydenburgiana; Wiesner 1992: 66, Werner 2000a: 159.

Type Locality. Not indicated.

Type specimens. "Female unknown": 1 &, labeled "Leydenburg" (TMSA!; Werner 2000a); 1 &, labeled "District Leydenburg, 1896; Type" (SAM!; not listed by Cochrane 1995).

ILLUSTRATIONS. Habitus (Werner 2000a, figs, 139, 139.1, colour pictures); labrum, elytra, aedeagus (Cassola 1975, p. 199, fig. 8, sub *Dromica* sp.); aedeagus (Cassola, this paper, fig. 47).

DISTRIBUTION. South Africa. Northern Province: Mica-Hoedspruit rd at 4 km S Mica (Cassola 1975,

sub *Dromica sp.*; Werner 2000a; FCC, KWC, MRAC). *Mpumalanga*: Lydenburg (Péringuey 1898; Werner 2000a; SAM, TMSA).

LIMBATA Bertoloni, 1858

Dromica limbata Bertoloni, 1858: 308, t. 23, figs 3, 4.

Myrmecoptera limbata; Fleutiaux 1892: 35.

Dromica limbata, IX. Gruppe "specialis-limbata"; Horn 1926a: 91.

Dromica limbata; Wiesner 1992: 65, Werner 2000a: 149.

Type locality. "Legit Eq. Karolus Fornasinius in ripis fluminis Magnárra provinciae Inhambanensis Mozambici".

Type specimens. Number not given, but both sexes included: 3 (MZUB; Tommasini & Marini 1988); 1 \(\text{(DEI!; D\"obler 1973)}.

ILLUSTRATIONS. Habitus (Bertoloni 1857, pl. 23, figs 3, 4; Tommasini & Marini 1988, tav. I, fig. 2; Werner 2000a, colour fig. 125); aedeagus (Cassola, this paper, fig. 95).

DISTRIBUTION. <u>Mozambique</u>. Magnarra River (Bertoloni 1858; Werner 2000a; DEI). *Maputo*: Tembé (Péringuey 1896). *Inhambane*: Nhambuica (DEI, FCC).

REMARKS. Chaudoir (1860), Péringuey (1896) and Junod (1899, pl. V, fig. 1) misidentified this species and referred to it specimens of *consimilis* (Horn 1926a). Apparently *limbata* is a Mozambique endemic.

LIMBATA Chaudoir, 1860

Myrmecoptera limbata Chaudoir, 1860: 304.

Junior synonym of Dromica Saundersi; Horn 1926a: 90.

Junior synonym of *Dromica consimilis*; Wiesner 1992: 64, Werner 2000a: 149.

LIMBATA Péringuey, 1893

Myrmecoptera limbata Péringuey, 1893: 65.

Junior synonym of Myrmecoptera Saundersi; Péringuey 1896: 100, 116.

Junior synonym of Dromica Saundersi; Horn 1926a: 90.

LIMBATA Junod, 1899

Myrmecoptera limbata Junod, 1899: 167, t. 5, fig. 1.

Junior synonym of Dromica Saundersi; Horn 1926a: 90.

LIMPOPOIANA Péringuey, 1892

Myrmecoptera limpopoiana Péringuey, 1892b: 95.

Dromica limpopoiana, VI. Gruppe "bilunata"; Horn 1926a: 90.

Dromica limpopoiana; Wiesner 1992: 64, Werner 2000a: 139.

Type Locality. "Middle Limpopo (Neighbourhood of Fort Tuli)".

Type specimen. Female ("I have not seen the male of this species"): 1 \, "syntypus" (DEI!; D\"obler 1973).

ILLUSTRATIONS. Habitus (Werner 2000a, colour figs 109, 109.1, 109.2, 109a, 109a.1); left elytron (Horn 1940, pl. 17, figs 17, 18; pl. 19, fig. 1); aedeagus (Cassola, this paper, fig. 100).

DISTRIBUTION. Zimbabwe. Plumlico (Werner 2000a); Sohusi (CROC, FCC, JPC). *Midlands*: Lower Gwelo [=Gweru] (CROC, FCC). *Matabeleland North*: Bulawayo (Péringuey 1896, sub *M. speciosa*; Werner 2000a; ABC, TMSA); 60 km N Bulawayo: Maram Posa rd (Werner 2000a). *Matabeleland South*: Bulawayo-Ravenswood (KWC); SE Bulawayo [20°30S-29°02E] (DWBC); E Bulawayo: Enthokozweni Camp [19°47S-28°33E] (DWBC); S of Marula nr Nkukhu (FCC); Plumtree (DEI, FCC, KWC, MRAC, NCI); Empandeni nr Plumtree (FCC, MRAC); Sawmills [19°35S-28°02E] (FCC); Matopos NP (FCC, TMSA); Fort Tuli (Péringuey 1892b, 1893); Middle Limpopo (DEI). *Masvingo*: Lake Mutirikwi (FCC). Botswana (Wiesner 1992, Werner 2000a). South Africa. Eastern Cape: Willowmore (TMSA). *Northern Province*: 20 km E Waterpoort (KWC, PSC); Zoutpansberg (Werner 2000a). *KwaZulu/Natal*: Shongweni Dam (CROC, FCC).

Remarks. Elytral markings of most specimens usually show, in addition to the sub-apical lunule, a conspicuous roundish discal patch after the middle and an ill-defined short longitudinal stripe between the juxta-sutural costa and the lateral margin (m. *speciosa* Pér.). Overlapping of ranges would exclude subspecific status.

LIZLERI Werner, 1996

Dromica lizleri Werrner, 1996: 57.

Dromica lizleri; Werner 2000a: 129.

Type Locality. "Ethiopia, 50 km Northeast Mega, Sidamo Province".

Type specimens. Holotype 3 (KWC); 1 3 (KWC).

ILLUSTRATIONS. Habitus, aedeagus (Werner 1996, fig. 1); habitus (Werner 2000a, colour fig. 97).

DISTRIBUTION. Ethiopia. Sidamo: 50 km NE Mega (Werner 1996, 2000a; KWC).

Remarks. This recently described species, apparently belonging to the *schaumi* complex, is known so far by two male specimens only.

LULUANA Basilewsky, 1948

Dromica (Myrmecoptera) Stutzeri subsp. luluana Basilewsky, 1948: 151.

Dromica stutzeri luluana; Schüle & Werner 2001: 27.

Type locality. "Congo belge, Lulua: Kafakumba".

Type specimens. "2 \eth et 2 \updownarrow ": lectotype, \updownarrow (Schüle & Werner 2001; IRSNB); 1 \eth , 2 \updownarrow \updownarrow , paralectotypes (Schüle & Werner 2001; IRSNB, MRAC!).

ILLUSTRATIONS. Habitus (Schüle & Werner 2001, figs 5, 28); labrum, aedeagus; metepisternum, lateral view of pronotum (Schüle & Werner 2001, figs 6, 7, 8, 19, 23).

LUNAI Basilewsky, 1965

Dromica lunai Basilewsky, 1965: 138.

Dromica lunai; Wiesner 1992: 65, Werner 2000a: 175.

Type locality. "Angola: Caluango".

Type specimens. Holotype \eth (MRAC!); allotype \Im (MRAC!); 1 \Im (FCC!); 1 \Im (MDA); 1 \eth (MRAC!).

ILLUSTRATIONS. Habitus (Basilewsky 1965, fig. 1; Werner 2000a, colour figs 165, 165.1); aedeagus (Cassola, this paper, fig. 74).

DISTRIBUTION. D. R. Congo. Shaba: 17 mi W Tshikapa (Cassola 1980a). Angola. Lunda Norte:

Caluango: Sanvuri village (Basilewsky 1965; MRAC); Caluango: Camaloa River [08°20S-19°30E] (Basilewsky 1965; MRAC); Caluango: Caquele River (Basilewsky 1965; FCC, MRAC). Remarks. Five specimens only are apparently known in all so far.

LUNDANA Basilewsky, 1965

76

Dromica serietuberculata subsp. lundana Basilewsky, 1965: 142.

Dromica serietuberculata lundana; Wiesner 1992: 67, Werner 2000a: 168.

Type locality. "Angola: Cacanda, environs de Dundo".

Type specimens. "10 exemplaires": holotype δ (MRAC!); 1 \circ (FCC!), 1 \circ (KWC); 2 paratypes (MDA); 5 paratypes (MRAC!).

ILLUSTRATIONS. Habitus (Werner 2000a, figs 152a, 152a.1, colour pictures).

MARGINELLA Boheman, 1848

Cosmema marginella Boheman, 1848: 22.

Cosmema marginella; Fleutiaux 1892: 37.

Dromica marginella, XII. Gruppe "furcata-alboclavata"; Horn 1926a: 92.

Dromica marginella; Wiesner 1992: 65, Werner 2000a: 154.

Type locality. "Habitat in Caffraria interiore in montibus Makkalisensibus".

Type specimens. Number not given, but both sexes included: $1 \, 3$, $1 \, 9$ (NHRS: Basilewsky, pers. comm.).

ILLUSTRATIONS. Habitus (Werner 2000a, colour figs 134, 134.1, 134.2); aedeagus (Cassola, this paper, fig. 70); habitat (Werner 2000a, fig. 134.3).

DISTRIBUTION. Botswana: Tiokweng (CMNH, FCC); Ramoutsa (NCI). South Africa. Horizon (MRAC). Free State: Rhenosterpoort [25°43S-28°56E] (MRAC). North-West: Pilanesberg [25°15S-27°13E] (EAC); Rustenburg (MRAC); Potchefstroom (Péringuey 1893; MRAC); Magaliesberg (Boheman 1848). Gauteng: Johannesburg (MRAC); Krugersdorp (MRAC); Benoni (MRAC); Pretoria (FCC); Pretoria: Farie Glen (DLPC); Walhalla [=Valhalla, suburb of Pretoria?] (TMSA); Boksburg (Péringuey 1893). Northern Province: Thabazimbi (Werner 2000a; KWC, FCC, JPC, VTC); Warmbaths (TMSA, FCC); W of Warmbaths [24°55S-28°22E] (DWBC); Warmbaths-Thabazimbi, 54 km W (PSC); 10 km N Nylstroom (PSC); Wolkberg nr Haenertsburg (TMSA); Zoutspansberg (MRAC); Soutpan (FCC). Mpumalanga: Groblersdal: Kwarrielaagte (TMSA); Lydenburg (MRAC). KwaZulu-Natal: "Du pays des Zoulous" (Chaudoir 1864); Frere (TMSA); Sand River (FCC); Ladysmith (Werner 2000a; KWC).

REMARKS. The group of *marginella*, *alboclavata* and *albicinctella* definitely would need to be deeply reviewed, based on examination of the type specimens and of large, recent, well-labelled material from as many different localities as possible. Important differences in pronotal length (Boheman 1848: "Prothorace latitudine dimidio longior") and in elytral sculpture (Horn 1935a) are noticeable, despite the apparent overlapping of geographical ranges. Several distinct species are likely to be confirmed or recognized, however relationships and respective distributions are far from being clear. Lack of examination of type specimens and incertainty about their origins make present identifications to be regarded as provisional only.

MARGINELLA Chaudoir, 1864

Dromica marginella (Cosmema) Chaudoir, 1864: 73.

Junior synonym of Cosmema albicincta (sic!); Fleutiaux 1892: 37.

Junior synonym of *Dromica albicinctella*; Bates 1878: 334.

Junior synonym of *Dromica alboclavata*; Horn 1897d: 62, Horn 1926a: 92, Wiesner 1992: 66, Werner 2000a: 156.

MARGINELLA Péringuey, 1893

Cosmema marginella Péringuey, 1893: 89.

Junior synonym of Cosmema albicinctella; Horn 1896b; 353, Péringuey 1898: 308.

Junior synonym of Dromica albicinctella; Horn 1908c: 165.

MARGINEPUNCTATA W. Horn, 1908

Cosmema marginepunctata Horn, 1908a: 32.

Dromica marginepunctata, XV. Gruppe "transitoria-auropunctata-elegantula"; Horn 1926a: 94.

Dromica marginepunctata; Wiesner 1992: 67, Werner 2000: 177.

Foveodromica marginepunctata (comb. n.).

Type locality. "Angola (Chiyaka distr.)".

Type specimens. Number not given, but both sexes included: $6 \ 3 \ 3$, $2 \ 9 \ 9$ (DEI!).

ILLUSTRATIONS. Aedeagus (Cassola, this paper, fig. 112).

DISTRIBUTION. <u>Angola</u>. Chiyaka, Ekuiva River (Wellman & Horn 1908). *Benguela*: Benguela (Horn 1908a; Ferreira 1965; DEI); Ebanga (Horn 1935b; Ferreira 1965); Ganda (Horn 1935b). *Cuando Cubango*: Cuchi nr Menongue (Cassola 1980a; CAS).

REMARKS. The female specimen from "Calulo", pictured by Werner (2000a, fig. 172) sub marginepunctata, should in reality be a paratype specimen of *juengeri*.

MARSHALLANA W. Horn, 1901

Myrmecoptera Marshallana Horn, 1901: 123.

Dromica Marshallana, IV. Gruppe "clathrata-Mauchi"; Horn 1926a: 86.

Dromica marshallana; Wiesner 1992: 62, Werner 2000a: 109.

Pseudodromica marshallana (comb. n.).

Type locality. "Umtali (Dec.)".

Type specimens. "1 ♂ ♀" (DEI!).

ILLUSTRATIONS. Habitus (Werner 2000a, colour figs 78.1, 78.2); aedeagus (Cassola, this paper, fig. 122). DISTRIBUTION. Zimbabwe. *Midlands*: Chivhu: The Range (FCC). *Manicaland*: Umtali [=Mutare] (Horn 1901; Werner 2000a; BMNH, DEI); Umtali: Lorpadgi River (Werner 2000a); Rusape (JWC, KWC); N Rusape (FCC). <u>Mozambique</u>. *Manica*: Vila Pery [=Chimoio] (Horn 1932b: "M. Lesne a capturé son unique exemplaire sur le plateau boisé qui s'étend au nord de Vila Pery. L'insecte courait avec la plus grande agilité sur le sol, parmi les feuilles mortes"; MRAC).

REMARKS. Relationship with *polyhirmoides* (m. *irregularis*) should be better investigated.

MARSHALLI Péringuey, 1894

Myrmecoptera Marshalli Péringuey, 1894: 450.

Dromica Mauchi (compl-F) Marshalli, IV. Gruppe "clathrata-Mauchi"; Horn 1926a: 87.

Dromica mauchii marshalli; Wiesner 1992: 63, Werner 2000a: 113.

Pseudodromica marshalli (revised status, comb. n.).

Type locality. "Mashunaland (Salisbury)".

Type specimen. "I know the male only" (ZMB?).

ILLUSTRATIONS. Habitus (Werner 2000a, colour figs 82a, 82a.1, 82a.2); left elytron (Horn 1906, pl. 1, fig. 32; Horn 1940, pl. 22, figs 5, 6); aedeagus (Cassola, this paper, fig. 126).

DISTRIBUTION. D.R. Congo. Shaba: Katanga (Horn 1929a); "1st Sh. Neave's camp over Zambesi watershed" (Burgeon 1937; MRAC. Tanzania. Iringa: Ruaha National Park (KWC). Zambia. Northern: Chiengi, Lake Moero (MRAC); Abercorn (FCC, IRSNB, MRAC); Mpokoroso (IRSNB); Mweru-Wantipa (FCC). Malawi. Mughese FR (Werner & Dudley 1998). North: Jembya NR [10°08S-33°27E] (Werner & Dudley 1998; FCC, CMNH); Jembya NR: Chisenga (Werner 2000a); Nyika NP (Werner & Dudley 1998); Uzumara FR [10°53S-34°08E] (Werner & Dudley 1998). Central: Ntchisi FR (Werner & Dudley 1998); Dzalanyama FR [SW of Lilongwe] (Werner & Dudley 1998). South: Mulanje FR (Werner & Dudley 1998); Limbe: Bangwe Forest (VAC). Zimbabwe. Mashonaland East: Salisbury [=Harare] (Péringuey 1894, 1896; Werner 2000a; ABC, FCC, MRAC, NCI, TMSA). Manicaland: Rusape (JWC).

Remarks. Major differences in elytral markings and overlapping of geographical ranges would suggest *marshalli* to be a species by its own, other than *mauchii*.

MASHUNA Péringuey, 1894

Myrmecoptera Mashuna Péringuey, 1894: 449.

"Inorn-F" of Dromica polyhirmoides, IV. Gruppe "clathrata-Mauchi"; Horn 1926a: 87.

Junior synonym of *Dromica polyhirmoides*; Wiesner 1992: 62, Werner 2000a: 109.

Junior synonym of *Pseudodromica polyhirmoides* (comb. n.).

Type locality. "Mashunaland (Salisbury)".

Type specimens. Number not given, but both sexes included (ZMB?).

MAUCHII Bates, 1872

Dromica (Myrmecoptera) Mauchii Bates, 1872: 287.

Dromica Mauchi; Demoor 1886: 48.

Myrmecoptera Mauchi; Fleutiaux 1892: 36, Péringuey 1893: 70.

Dromica Mauchi, IV. Gruppe "clathrata-Mauchi"; Horn 1926a: 87.

Dromica mauchii; Wiesner 1992: 62, Werner 2000a: 113.

Pseudodromica mauchii (comb. n.).

Type locality. "Region of the Middle Limpopo".

Type specimen. "?" (MNHN? BMNH?).

ILLUSTRATIONS. Habitus (Oates 1881, pl. G, fig. 5, *D. oatesii*; Werner 2000a, colour figs 82, 82.1, 82.2, 82.3, 82b, 82b.1, 82b.2, 82c, 82c.1); elytra (Horn 1927, figs 43-48); left elytron (Horn 1906, pl. 1, figs 33-35; Stegemann 1930, fig. 75; Horn 1940, pl. 22, fig. 4); aedeagus (Cassola, this paper, fig. 125); live specimen (Cassola, this paper, colour fig. 159).

DISTRIBUTION. Subsp. mauchii Bates, 1872

Zambia. Central: Kafue City (FCC); Mazabuka [SW of Lusaka] (JPC, JWC); Kafue River (Werner

2000a). Southern: Batoka (FCC); Chikuni nr Monze (Horn 1936). Malawi. Malosa Mt. (Werner & Dudley 1998); Ngapani (Werner & Dudley 1998). South: Limbe: Bangwe Forest (VAC); Mangochi (Werner & Dudley 1998); South: Zomba, upper Shire River (MRAC). Zimbabwe. Hillside TMSA). Mashonaland West: Umfuli River [=Mupfure-Sanyati River] (Péringuey 1896, sub D. umfuliana; NCI). Mashonaland East: Salisbury [=Harare] (MRAC). Matabeleland: Matabeleland (Westwood, in Oates 1881, sub D. oatesii); Lomagundi (MRAC). Matabeleland South: Middle Limpopo (Bates 1872; Péringuey 1893); Bulawayo (MRAC); Sawmills [19°35S-28°02E] (TMSA); Hope Ftn. (Werner 2000a; MRAC). Manicaland: Dorowa nr Mutare (FCC). Mozambique (Wiesner 1992, Werner 1993a, Werner 2000a).

Subsp. purpurascens Bates, 1886

Tanzania: "East Central Africa" (?): Mamboia (Bates 1886; MRAC); Zaranda (MRAC); Issansu (Horn 1910a); Mpangwe (MRAC). *Singida*: Msagaa [36 mi E Singida] (BMNH); Msughaa [30 mi E Singida] (BMNH); Ndala Mission [04°45S-35°15E] (BMNH). *Dodoma*: Dodoma (FCC, MRAC, MSNT); Babati: 30 km to Dodoma (Werner 2000a); Babati-Kondoa (Werner 2000a; FCC); Kondoa-Dodoma (Werner 2000a, sub ssp. *mauchii*); Ugogo [6°07S-35°30E] (Kolbe 1897; Horn 1910a); Mitundo (FCC, KWC); Mpwapwa (Kolbe 1897; BMNH, MRAC). *Rukwa*: Mpanda, 22 mi. S (CAS). *Iringa*: Uhehe (Horn 1910a); Mittel Uhehe (Horn 1921); Sadani nr Iringa (MSNC); Ruaha NP (KWC); Tossamanga nr Iringa (BMNH). *Ruvuma*: Kigonsera (Horn 1927; FCC, HSC, MCZR, MRAC). *Lindi*: Lindi (Horn 1910a). *Mtwara*: Lukuledi [38°30E-10°30S] (MRAC).

Subsp. albocostata W. Horn, 1939

<u>Kenya</u>. *Eastern*: Kitui (Horn 1939; Werner 2000a; DEI, NMN); Ikutha (Horn 1910a; Werner 1993a; DEI, KWC); Wa-Kamba nr Kibwezi [rd Nairobi-Mombasa] (Werner 2000a; MCZR, MRAC); Mwingi: Nguni (FCC).

REMARKS. Major differences in elytral markings and overlapping of geographical ranges would suggest *marshalli* to be a species by its own, other than *mauchii*. On the contrary, *purpurascens* and *albocostata* appear to be valid north-eastern subspecies of *mauchii*.

MESOTHORACICA W. Horn, 1909

Dromica (Myrmecoptera) Erikssoni subsp. mesothoracica Horn, 1909d: 101.

Dromica Erikssoni mesothoracica, IX. Gruppe "specialis-limbata"; Horn 1926a: 91.

Dromica mesothoracica; Wiesner 1992: 65, Werner 2000a: 146.

Type Locality. "S.O.-Katanga..., Langenburg (Deutsch-Ostafrika)".

Type specimens. Number not given, but both sexes included; 2 syntypes (DEI!; not listed by Döbler 1973).

ILLUSTRATIONS. Habitus (Burgeon 1937, pl. 1, fig. 3; Werner 2000a, colour figs 121, 121.1); aedeagus (Cassola, this paper, fig. 77).

DISTRIBUTION. <u>D. R. Congo</u>. *Shaba*: "S.O.-Katanga" (Horn 1909d); Elisabethville [=Lubumbashi] (Burgeon 1937; ABC, CIC, FCC, JWC, MRAC); Lubumbashi (MRAC); Kapiri (Horn 1914b; MRAC); Tekanini (Horn 1929a; MRAC); Lukafu, Ngaye, Wapishamba, Mwabo (Burgeon 1937; MRAC); Kaniama (MRAC); Shiniamsu (Horn 1929a); Kasenga (Horn 1929a; Burgeon 1937); Kanona (IRSNB); Mura (Werner 2000a; MRAC). <u>Tanzania</u>. *Rukwa*: Sumbwanga (MRAC); Zimba [7°52S-31°49E] (IRSNB). *Mbeya*: "Langenburg (Deutsch-Ostafrika)" [=Mbeya, 33°20E-9°S] (Horn 1909d); Vwawa (Werner 2000a; KWC). <u>Zambia</u>. *Northern*: Abercorn [=Mbala] (FCC, IRSNB, MRAC, MZL); 11 mi. W Mbala (CAS); Chiengi: Lake Moero (FCC, MRAC); Mpulungu (MHC).

Cassola Cassola

Eastern: 58 mi. N Mpika (CAS); Kasanka NP: Waka Camp [12°30S-30°15E] (NCI).

REMARKS. The supposed ssp. prolongatesignata has been described from the very same region (Elisabethville, Kapiri) as mesothoracica, and consequently it could hardly be retained as a valid geographical race. Instead, smaller size, prolonged marginal band and lack of preapical discal spur would suggest prolongatesignata to deserve full specific status. Two small specimens ($\mathcal{S} \circ \mathcal{P}$) from Kundelungu (FCC) could also be considered to be specifically distinct, as the male aedeagus has a much different, more hooked apex. Moreover, several specimens from Zambia exhibit major differences in pronotal sculpture and are here considered to represent a separate full species, which was described above (D. zambiensis n. sp.). Looking at my own material only, I presently think that three or even four distint species may be involved in. The group of mesothoracica definitely deserves to be deeply reviewed, based on larger material from many different localities.

MICANS W. Horn, 1900

Myrmecoptera micans Horn, 1900a: 210.

Dromica gunningi micans; Horn 1904a: 91.

Dromica gunningi micans, IV. Gruppe "clathrata-Mauchi"; Horn 1926a: 86.

Dromica gunningi micans; Wiesner 1992: 62, Werner 2000a: 108.

Junior synonym of *Pseudodromica gunningi* (syn. n., comb. n.).

Type locality. "Komatipoort (Hartmann: Transvaal)".

Type specimens. "♂♀" (not in DEI; ZMB?).

ILLUSTRATIONS. Habitus (Werner 2000a, colour figs 77a, 77a.1).

MIMA Péringuey, 1896

Myrmecoptera mima Péringuey, 1896: 118.

Dromica polyhirmoides mima, IV. Gruppe "clathrata-Mauchi"; Horn 1926a: 87.

Dromica polyhirmoides mima; Wiesner 1992: 62, Werner 2000a: 110.

Junior synonym of *Pseudodromica polyhirmoides* (syn. n., comb. n.).

Type locality. "near Fort Tuli in Zambesia".

Type specimens. Number not given, but both sexes included (ZMB?).

ILLUSTRATIONS. Habitus (Werner 2000a, colour fig. 79a).

Remarks. Until better information this form is herein considered to be merely a junior synonym of *polyhirmoides*.

MIRABILIS Cassola, Schüle & Werner, 2000

Dromica mirabilis Cassola, Schüle & Werner, 2000: 272.

Type locality. "36 km S of Piet Retief, Mpumalanga, South Africa".

Type specimens. Holotype \eth (TMSA!); $1 \ \Diamond$ (DEI!); $3 \ \eth \eth$, $2 \ \Diamond \Diamond$ (FCC!), $3 \ \Diamond \Diamond$ (KWC!); $1 \ \eth$, $4 \ \Diamond \Diamond$ (PSC!).

ILLUSTRATIONS. Habitus (Cassola et al. 2000, colour fig. 1); habitus, labrum, aedeagus (Cassola et al. 2000, figs 2, 3a-d); aedeagus (Cassola, this paper, fig. 37); habitat (Cassola et al. 2000, fig. 4 a, b); live specimen (Cassola, this paper, colour fig. 140).

DISTRIBUTION. South Africa. Mpumalanga: 36 km S Piet Retief (Cassola et al. 2000).

REMARKS. Known so far from the type locality only.

MIRANDA Péringuey, 1896

Cosmema miranda Péringuey, 1896: 111.

Dromica miranda, XII. Gruppe "furcata-alboclavata"; Horn 1926a: 92.

Dromica miranda; Wiesner 1992: 65, Werner 2000a: 154.

Type locality. "Orange Free State (Ventersburg)".

Type specimen. Holotype ♀ (SAM!; not listed in Cochrane 1995).

ILLUSTRATIONS. Habitus (Werner 2000a, colour figs 133, 133.1); aedeagus (Cassola, this paper, fig..32).

DISTRIBUTION. <u>South Africa</u>. *Free State*: Ventersburg (Péringuey 1896; Werner 2000a; SAM); Odendaalsrus (BVNC); Maghaleen nr Zastron (FCC). <u>Lesotho</u>. Basutoland: Mamates (Werner 2000a; TMSA).

Remarks. This species is remarkable because it possesses a quite unusual puzzling structure, i.e. a "finger-shaped spur" on the right side of the male aedeagus, first described by Schüle & Werner (1999) for *D. endroedyi*.

MORAVECI Werner, 1998

Dromica moraveci Werner, 1998: 168.

Dromica moraveci; Werner 2000a: 134.

Type locality. "Eastern Tanzania, Utete (Rufiji)".

Type specimens. Ten specimens: holotype \eth (TMSA); $1 \ \Diamond$ (FCC!); $1 \ \eth$, $1 \ \Diamond$ (KWC); paratypes (JMCB, JPC, WDSC).

ILLUSTRATIONS. Habitus, labrum, aedeagus (Werner 1998, figs 6, 7); habitus (Werner 2000a, colour figs 101, 101.1).

DISTRIBUTION. Tanzania. Pwani (coast): Utete: Rufiji (Werner 1998, 2000a; FCC).

REMARKS. Obviously a species of the *D. schaumi* complex.

MURPHYI Werner & Schüle, 2001

Dromica murphyi Werner & Schüle, 2001: 263.

TYPE LOCALITY. "Malawi, Mzuzu District, Nkhorongo".

Type specimens. Five specimens: holotype δ (DEI); $1 \$ (KWC); $1 \$ (MIBC); $1 \$ (PSC); $1 \$ (TMSA).

ILLUSTRATIONS. Habitus (Werner & Schüle 2001, figs 1, 6, 7); labrum (Werner & Schüle 2001, figs 2, 3); aedeagus (Werner & Schüle 2001, figs 4a, b); penultimate palpomere of labial palpi (Werner & Schüle 2001, fig. 5).

DISTRIBUTION. Malawi. North: Nkhorongo (Werner & Schüle 2001).

REMARKS. Reportedly a species of the *D. dolosa* complex.

NATALICA Péringuey, 1893

Dromica Natalica Péringuey, 1893: 77.

Junior synonym of *Dromica clathrata sculpturata*; Horn 1926a: 86, Wiesner 1992: 62, Werner 2000a: 106.

Junior synonym of *Pseudodromica sculpturata* (comb. n.).

Type locality. "Natal (D'Urban)".

Type specimens. Number not given, but both sexes included (ZMB?).

NEAVEI W. Horn, 1913

Dromica (Myrmecoptera) invicta subsp. Neavei Horn 1913: 272.

Dromica invicta Neavei, IV. Gruppe "clathrata-Mauchi"; Horn 1926a: 87.

Dromica invicta var. Neavei; Horn 1940: 276.

Dromica invicta neavei; Wiesner 1992: 62, Werner 2000a: 112.

Pseudodromica neavei (b. sp., comb. n.).

Type Locality. "Mpika (I.1908, Dr. Sheffield Neave)".

Type specimens. "1 $3 \circ$ ": 1 $3 \circ$ (DEI!); 1 \circ (MRAC!).

ILLUSTRATIONS. Habitus (Werner 2000a, colour fig. 81a.1); left elytron (Horn 1940, pl. 22, fig. 3).

DISTRIBUTION. D. R. Congo. "Congo, Babault" (DEI). Shaba: Tumbwe, 35 km W Elisabethville [=Lubumbashi] (Horn 1929a, sub setosula; Cassola 1983a, sub pseudosetosula; MRAC); Lubumbashi (Cassola 1983a, sub pseudosetosula; ABC, FCC, JWC, MRAC); Kanzenze (Cassola 1983a, sub pseudosetosula; ABC, FCC, JWC, MRAC); Kanona (CSS, IRSNB); Zilo (JWC). Zambia. Kabatu (DEI). North-Western: Solwezi [12°11S-26°25E] (Cassola 1983a, sub pseudosetosula; BMNH); Lusala [12°43S-28°05E] (Cassola 1983a, sub pseudosetosula; BMNH). Copperbelt: N'Changa (Cassola 1983a, sub pseudosetosula; BMNH, FCC, ABC, TMSA). Central: Serenje (NCI); Lusaka (Werner 2000a, sub pseudosetosula); Kafue City (FCC, GAC, JPC). Eastern: Mpika (Horn 1913; Werner 2000; MRAC). Malawi. Central: Viphya: Kalungulu (Werner & Dudley 1998, sub pseudosetosula).

REMARKS. *P. neavei* has definitely to be raised to full specific status, as it has nothing to do with *invicta*. As to *pseudosetosula*, it proved to be conspecific, probably synonymous, with *neavei*, but it is here maintained provisionally as a subspecies because of some slight differences in colour of labrum and shape of pronotum.

NEUMANNI Kolbe, 1897

Myrmecoptera neumanni Kolbe, 1897: 347.

Dromica egregia Neumanni, V. Gruppe "Bennigseni-egregia"; Horn 1926a: 89.

Dromica egregia neumanni; Wiesner 1992: 63, Werner 2000a: 126.

Dromica neumanni (revised status).

Type locality. "Zwischen Ngoroine und Mukenge an der Ostseite des Victoria-Nyansa".

Type specimen. "♀" (ZMB?).

ILLUSTRATIONS. Habitus (Werner 2000a, colour figs 94b, 94b.1, 94b.2); left elytron (Horn 1940, pl. 17, figs 9-11); aedeagus (Cassola, this paper, fig. 61).

DISTRIBUTION. Sudan. Equatoria: Yei-Maridi (Mandl 1968, sub D. egregia). Uganda (Horn 1911). Acholi Lango: Gulu (BMNH, NMN); Madi (BMNH); Madi Opei (FCC, NMN). Karamoja: Kotido (FCC). Busoga: Jinja (Horn 1911; MSNG). Rwanda. Akagera NP (Cassola & Miskell, in press; FCC); Lac Kivumba (Werner 2000a); Gashora (FCC). Kenya. Western: Eldoret: Uasingishu (Cassola & Miskell, 2001; FCC); Elgon district (Burgeon 1937; MRAC). Nairobi: Namanga, 30 km to Nairobi (KWC). Tanzania. Issansu (Horn 1910a). Kigoma: Kakonko nr Kibondo (Cassola & Miskell, 2001; FCC, JMC, JWC). Mwanza: Usagara [2°41S-33°00E] (Horn 1910a); Ukerewe I. (Horn 1910a; Werner 2000a; FCC, MRAC, NMN). Mara: E side of Lake Victoria: Ngoroine-Mukenge (Kolbe

1897). Arusha: Meru-Berg (Werner 2000a). Tabora: Tabora (Horn 1921). Iringa: Uhehe (Horn 1910a); Mittel Uhehe (Horn 1921); Uhehe nr Iringa (Horn 1921). Morogoro: nr Mikumi (KWC, MSNC: new species?). D.R. Congo. Haut-Zaire: Kibali-Ituri (Burgeon 1937; Basilewsky 1962); Ituri: Mahagi, Niarembe (Burgeon 1937; MRAC); Abok (Burgeon 1937; FCC, MRAC); Garamba NP (Basilewsky 1962). Shaba: Katanga (Horn 1929a). ?Zimbabwe. Zimbabwe (Werner 2000a). REMARKS. See discussion under egregia. It is interesting to notice that Burgeon (1937) recorded both elongatoplanata (sub neumanni) and cupricollis from a single locality (Madona-Bangweolo) at least, what seems to strengthen their concept as distinct full species. However, specimens from southern Congo and northern Zambia should be carefully re-examined. Also specimens from southern Equatoria should be re-examined, because incorrect separation from cupricollis could possibly be noticed.

NIGROPLAGIATA W. Horn, 1926

Myrmecoptera nigroplagiata Horn, 1926b: 164.

Dromica nigroplagiata; Basilewsky 1948b: 151, Wiesner 1992: 65, Werner 2000a: 147.

Type locality. "Sashila-Fluß in Katanga".

Type specimens. Number not given, but both sexes included: 1 ? (BMNH!); 3 ? ? (DEI!); 1 ? , 3 ? ? (MRAC!).

ILLUSTRATIONS. Habitus (Werner 2000a, colour figs 122, 122a); aedeagus (Cassola, this paper, fig. 76). DISTRIBUTION. D. R. Congo. Shaba: riv. Sashila (Horn 1926b; BMNH, DEI, MRAC); Kapanga, Kafakumba, Kwanda (Lubilash), Luashi, Lupweshi, Tshibobe, Kikumba, Kalehe, Kinda (Cassola 1986b; FCC, IRSNB, MRAC); Lukoshi-Luco (Werner 2000a); Sandoa (Horn 1931, ssp. *dilacerata*; Cassola 1986b; FCC, IRSNB, MRAC); Tshibamba (Cassola 1986b; FCC, MRAC); Mukunkoto (Cassola 1986b; FCC, MRAC); Muteba (Cassola 1986b; Werner 2000a; FCC, MRAC).

NOBILITATA Gerstäcker, 1867

Myrmecoptera nobilitata Gerstäcker, 1867: 9.

Dromica (Myrmecoptera) nobilitata: Gerstäcker, in Decken 1873: 55.

Myrmecoptera nobilitata; Fleutiaux 1892: 35, Kolbe 1897: 348.

Dromica nobilitata, IV. Gruppe, Untergruppe "Bertolonii-nobilitata"; Horn 1926a: 88.

Dromica nobilitata; Wiesner 1992: 63, Werner 2000a: 121.

Type locality. "...in itinere inter 'Bura' et lacum Jipe".

TYPE SPECIMEN: "Specimen unicum" (ZMB?).

ILLUSTRATIONS. Habitus (Werner 2000a, colour figs 91, 91.1, 91.2, 91a, 91a.1, 91b, 91b.1); left elytron (Horn 1940, pl. 17, figs 1-5 & pl. 23, fig. 5); aedeagus (Cassola, this paper, fig. 81); habitat (Werner 2000a, fig. 98.8).

Distribution. <u>Ethiopia</u>. *Sidamo*: Moyale (Müller 1939; Cassola 1978a; Werner 1993b). <u>Kenya</u>. *Coast*: "trouvée entre le lac Jipé et les monts Boura" (Chaudoir 1878); Taru, inland of Mombasa (Kolbe 1897); Shimba Hills (BMNH, JPC); Rabai (BMNH); "Taita, Mwatate (FCC); Voi (Werner 1993b, 2000a; FCC, JWC, KWC); Mombasa (Werner 2000a; DEI, MRAC). *Eastern*: Ikutha, (Horn 1903c; Werner 1993a, 2000; DEI); Kibwezi (Horn 1923, ssp. *interruptemaculata*; Werner 1993a, 2000a; DEI). *Rift Valley*: Olgasalie, Olorgasaile (BMNH, NMN); Namanga-Nairobi (Werner 2000a; FCC). <u>Tanzania</u>. Luipoldkette (Horn 1903c, ssp. *reducta*; Werner 2000a; DEI); Usaramo (Horn 1896a; DEI); Moa (DEI); "Trockenwald" nr Mtotohovu (Horn 1921; DEI). *Tanga*: Usambara (Horn

Cassola Cassola

1921; DEI); Sega nr Tanga (Horn 1896a; DEI). Ruvuma: Nyassa (DEI). Lindi: Lindi (FCC).

REMARKS. The species complex of *nobilitata* (with its supposed subspecies *reducta* and *interruptemaculata*), *erlangeri*, *hildebrandti*, and *kenyana*, should be reviewed, based on larger East African materials. Relationships and respective distributions are not fully clear.

OATESII Westwood, 1881

Dromica (Myrmecoptera) Oatesii Westwood, 1881: 359.

Junior synonym of Myrmecoptera Mauchi; Fleutiaux 1892: 36.

Junior synonym of Dromica Mauchi; Horn 1926a: 87 ("Oatesi").

Junior synonym of Dromica mauchii; Wiesner 1992: 62 ("oatesi"), Werner 2000a: 113 ("oatesi").

Junior synonym of *Pseudodromica mauchii* (comb. n.).

Type locality. "Matabeleland ... Foem.".

Type specimen. "Foem." (BMNH?).

ILLUSTRATIONS. Habitus (Westwood 1881, pl. G, fig. 5 & pl. H, fig. 1, 1a, 1b).

OBERPRIELERI Cassola, 1986

Dromica oberprieleri Cassola, 1986a: 137.

Dromica oberprieleri; Wiesner 1992: 62, Werner 2000a: 107.

Pseudodromica oberprieleri (comb. n.).

Type locality. "Transvaal, Hans Merensky Nature Reserve".

Type specimens. Holotype 3 (NCI!); allotype 9 (NCI!); 2 33 (FCC!); 4 33 (NCI!).

ILLUSTRATIONS. Habitus (Cassola 1986a, fig. 1; Werner 2000a, colour fig. 76); aedeagus (Cassola 1986a, fig. 2).

DISTRIBUTION. <u>Zimbabwe</u>. *Matabeleland South*: Plumtree (DEI). <u>South Africa</u>. Koedoes River (TMSA); Lemana (TMSA). *Northern Province*: 34 km E Tshipise [22°28S-30°27E] (DWBC); Hans Merensky NR [23°40S-30°39E] (Cassola 1986a; Werner 2000a; FCC, NCI); Mooketsi (FCC, TMSA); 7.5 km E Gravelotte [23°55S-30°40E] (DWBC); Griffin Mine [nr Leydsdorp, 23°59S-30°31E] (TMSA); Leydsdorp (FCC, KWC).

OCTOCOSTATA Chaudoir, 1864

Dromica octocostata Chaudoir, 1864: 38.

Dromica octocostata; Fleutiaux 1892: 34.

Dromica octocostata, III. Gruppe "bicostata-octocostata"; Horn 1926a: 85.

Dromica octocostata; Wiesner 1992: 61, Werner 2000a: 103.

Pseudodromica octocostata (comb. n.).

TYPE LOCALITY. "... de la baie de Lagoa, côte sud-est d'Afrique".

Type specimens. "Mes deux individus femelles ...": 1 \(\text{(BMNH!)}; 1 \(\text{\comp. typ. Basilewsky"} \) (MRAC!).

ILLUSTRATIONS. Habitus (Horn 1940, pl. 10, fig. 2, male; Werner 2000a, colour fig. 68.1, female).

DISTRIBUTION. South Africa. KwaZulu/Natal: Natal (Werner 2000a; MRAC); Vernon Crakes (CIC);

Loteni (CIC). <u>Mozambique</u>. *Maputo*: Delagoa Bay [=Maputo] (Chaudoir 1864, Péringuey 1893; BMNH).

Remarks. The examination of genitalia of the only known male specimen (in the BMNH collection)

has confirmed the inclusion of this species in the genus *Pseudodromica*. However, Horn (1926a) had already placed it, quite correctly, between *tuberculata* and *quinquecostata*.

OESTERLEI Werner, 1993

Dromica borana oesterlei Werner, 1993b: 14.

Dromica borana oesterlei; Werner 2000a: 129.

Dromica oesterlei (b. sp.).

Type locality. "Ethiopia, Gemu Gofa Prov., Arba Minch".

Type specimens. Holotype \mathcal{P} (ZSM); 1 \mathcal{E} (FCC!); paratypes (AOC, JWC, KWC, MRAC).

ILLUSTRATIONS. Habitus, aedeagus (Werner 1993b, figs 7a, c); habitus (Werner 2000a, colour figs 96a, 96a.1, 96a.2); aedeagus (Cassola, this paper, fig. 59); live specimens (Werner 2000a, colour fig. 96a.3; Cassola, this paper, colour fig. 145); habitat (Cassola, this paper, fig. 144).

DISTRIBUTION. <u>Ethiopia</u>. *Gemu Gofa*: Arba Minch (Werner 1993b, 1994, 2000a; FCC, MRAC); 5 km S Arba Minch (Werner 2000a); Konso (Werner 2000a).

REMARKS. By reason of its differently shaped, poorly dilated antennae, I provisionally consider here *oesterlei* to be a full distinct species, other than *borana*. They both apparently belong to the *batesi* group. However, the whole *batesi-schaumi-egregia* group, with all related species, should be deeply reviewed.

ONEILI W. Horn, 1925

Dromica (Myrmecoptera) O'Neili Horn, 1925a: 24.

Dromica O'Neili, VI. Gruppe "bilunata"; Horn 1926a: 90.

Dromica oneili; Wiesner 1992: 64, Werner 2000a: 140.

Type locality. "Chilimanzi Reserve (S. Rhodesia); Umvuma".

Type specimens. Number not given, but both sexes included: $1 \ 3, 3 \ 9 \ (DEI!)$.

ILLUSTRATIONS. Habitus (Werner 2000a, colour figs 110, 110.1, 110.2); left elytron (Horn 1940, pl. 19, fig. 2); aedeagus (Cassola, this paper, fig. 101).

DISTRIBUTION. Zimbabwe. Mashonaland East: Darwendale [17°43S-30°33E] (MRAC). Midlands: Umvuma [=Mvuma, 19°17S-29°32E] (Horn 1924; Werner 2000a; BMNH, DEI, MRAC); Mvuma, Gutu-Chatsworth rd (Werner 2000a; FCC); Chivhu nr. Buhera (FCC); 70 km N Chivhu nr Featherstone (FCC); 60 km SW Gweru nr Shangani (Werner 2000a; KWC). Matabeleland South: Nalatale Ruins [SSW of Gweru] (FCC, PSC). Manicaland: Chilimanzi NR [19°35S-30°45E] (Horn 1925b; DEI). Masvingo: Fort Victoria [=Masvingo] (FCC).

Remarks. Very similar to *limpopoiana* (m. *speciosa*). The slightly smaller size and shape of the subapical lunule may help to separe *oneili* from it.

ORBACHI Werner, 1993

Dromica orbachi Werner, 1993a: 60.

Junior synonym of Dromica taruensis; Werner 1999: 15, Werner 2000a: 133.

Type locality. "10 km SO Voi, Sagala Region, Kenya".

Type specimen. "♀" (KWC).

ILLUSTRATIONS. Habitus, labrum (Werner 1993a, figs 5, 6).

Cassola Cassola

PASSOSI Basilewsky, 1974

Dromica passosi Basilewsky, 1974: 674.

Dromica passosi; Wiesner 1992: 67, Werner 2000a: 175.

Type locality. "Angola: Ceilunga".

Type specimens. Holotype \Im (IANL!); allotype \Im (MRAC!).

ILLUSTRATIONS. Habitus (Basilewsky 1974, fig. 1; Werner 2000a, colour fig. 166); aedeagus (Cassola, this paper, fig. 78).

DISTRIBUTION. <u>Angola</u>. *Bié*: Ceilunga [12 km S Silva Porto, present-day Bié] (Basilewsky 1974; Cassola 1980a; Werner 2000; MRAC).

REMARKS. The two type specimens only are known so far.

PAULAE Cassola, this paper

Dromica paulae Cassola, this paper

Type locality. "Kenya, S of Malindi: Arabuko-Sokoke Forest".

Type specimen. Holotype ♀ (FCC!).

ILLUSTRATIONS. Habitus, labrum (Cassola, this paper, figs 18-19); habitat (Cassola, this paper, fig. 152).

DISTRIBUTION. Kenya. Coast: Arabuko-Sokoke FR (Cassola, hoc loco; FCC).

Remarks. Apparently a near relative of *taruensis*. Known so far by the single holotype female specimen only, this small species apparently co-occurs in the Arabuko-Sokoke Forest sympatrically with *schaumi* and *kenyana*.

PENTHERI W. Horn, 1899

Myrmecoptera Pentheri Horn, 1899c: 381.

Dromica Pentheri, VI. Gruppe "bilunata"; Horn 1926a: 90.

Dromica pentheri; Wiesner 1992: 64, Werner 2000a: 138.

Type locality. "a Doctore A. Penther meridionales Africae partes percurrente 'verisimillime in Matabeleland' captae").

Type specimens. "2 9?": 1 9 (DEI!).

ILLUSTRATIONS. Habitus (Werner & Wiesner 1994, fig. 20; Werner 2000a, colour figs 108, 108.1, 108.2); aedeagus (Cassola, this paper, fig. 73).

DISTRIBUTION. <u>Namibia</u>. *Ohangwena*: Ovambo [17°36S-17°53E] (Werner & Wiesner 1995; SMWN). *Okavango*: Dikweya: Kavango [17°41S-18°32E] (Werner & Wiesner 1994, 1995; SMWN); Khaudom GR [18°29S-20°56E] (Werner & Wiesner 1994; JWC). *Caprivi*: Kwando River [17°47S-23°20E] (Werner & Wiesner 1994; FCC, JWC, SMWN); W-Caprivi (Werner 2000). *Otjozondjupa*: Bushmanland [19°27S-19°50E] (Werner & Wiesner 1995; Werner 2000a; SMWN). <u>Zimbabwe</u>. *Matabeleland North*: Matabeleland (Horn 1899c); 60 km N Bulawayo: Maraposa Rd (FCC).

REMARKS. The second type specimen should be in the Vienna Museum, Austria (Horn 1899c). Relationship with *similis* (Cassola 1980a) should be better investigated. However, colour of labrum, shape of hind lobe of pronotum, sculpture of head and pronotum, and elytral markings, would suggest them to be separate species.

PERINGUEYI W. Horn, 1896

Dromica (Myrmecoptera) Peringueyi Horn, 1896c: 338.

Myrmecoptera peringueyi; Péringuey 1898: 311.

Dromica Peringueyi, V. Gruppe "Bennigseni-egregia"; Horn 1926a: 88.

Dromica (Myrmecoptera) Bennigseni Peringueyi; Horn 1929b: 5.

Dromica peringueyi; Wiesner 1992: 63, Werner 2000a: 123.

Type locality. "Regiones interiores Mosambicenses".

Type specimen. "1 ♂" (DEI!).

ILLUSTRATIONS. Habitus (Werner 2000a, colour figs 92, 92.1, 92.2); left elytron (Horn 1940, pl. 17, fig. 7); aedeagus (Cassola, this paper, fig. 86).

DISTRIBUTION. Zambia?. "Brit. C. Africa": Ubemba (MRAC). <u>Tanzania</u>. *Ruvuma*: Kigonsera (FCC, DEI); Songea (Werner 2000a). <u>Malawi</u>. *Central*: Chitala [Chitatala?, 13°40S-34°16E] (Werner & Dudley 1998). *South*: Malosa, Zomba Mt. [15°15S-35°18E] (Werner & Dudley 1998; Werner 2000a). <u>Mozambique</u>. "Mozamb. interior" (Horn 1896c; Péringuey 1898; Werner 2000a; DEI).

Remarks. The filiform antennae help to distinguish this species from the closely allied *bennigseni*. Male aedeagi are almost identical in both species.

PILOSIFRONS W. Horn, 1925

Dromica (Myrmecoptera) pilosifrons Horn, 1925a: 23.

Dromica pilosifrons, V. Gruppe "Bennigseni-egregia", "Gruppe pilosifrons"; Horn 1926a: 89.

Dromica pilosifrons; Wiesner 1992: 64, Werner 2000a: 137.

Type locality. "Rhodesia borealis".

Type specimen. "1 ♂" (DEI!).

ILLUSTRATIONS. Habitus (Werner 2000a, colour figs 106, 106.1); aedeagus (Cassola, this paper, fig. 93).

DISTRIBUTION. Zambia. N. Rhodesia (Horn 1925b; DEI); "Pemba (Nord-Rhodesia)" (Horn 1935a; DEI); Central: Kafue: Kafue River (FCC); Mazabuka [SW of Lusaka] (FCC, MRAC). Southern: Chikuni Mts. nr Monze (Horn 1936; Werner 2000a; MZFS); Batoka (FCC).

REMARKS. Wiesner (1992) recorded this species from Zimbabwe ("N Zimbabwe") only. Also Werner (2000a) recorded it from Zimbabwe, incorrectly stating that the Polish catholic mission in Chikuni, near Monze, lies in todays's Zimbabwe. The few available data would show this rare species to be a Zambian endemic.

PLANIFRONS W. Horn, 1896

Dromica planifrons Horn, 1896c: 339.

Dromica planifrons, IV. Gruppe "clathrata-Mauchi"; Horn 1926a: 86.

"Ein aberrantes Exemplar von Dromica clathrata sculpturata"; Horn 1935a: 101.

Dromica planifrons; Wiesner 1992: 61, Werner 2000a: 104.

Pseudodromica planifrons (comb. n.)

TYPE LOCALITY. "Zululand".

Type specimen. "1 ♂" (DEI!).

ILLUSTRATIONS. Habitus (Werner 2000a, colour fig. 70); aedeagus (Cassola, this paper, fig. 117).

DISTRIBUTION. South Africa. KwaZulu-Natal: "Zululand" (Horn 1896c).

Cassola Cassola

REMARKS. Examination of the single male holotype would suggest separate specific status from both *clathrata* and *sculpturata*, because of the different length and position of the elytral costae. However, it is admittedly surprising that no additional specimens have apparently been found so far, in the course of over one century.

POLYHIRMOIDES Bates, 1872

Dromica (Myrmecoptera) Polyhirmoïdes Bates, 1872: 286.

Myrmecoptera polyhirmoides; Fleutiaux 1892: 36, Péringuey 1893: 70.

Dromica polyhirmoides, IV. Gruppe "clathrata.Mauchi"; Horn 1926a: 86.

Dromica polyhirmoides; Wiesner 1992: 62, Werner 2000a: 109.

Pseudodromica polyhirmoides (comb. n.).

Type locality. "Region of Middle Limpopo, S.E. Africa".

Type specimens. Number and sex not given (MNHN? BMNH?).

ILLUSTRATIONS. Habitus (Werner 2000a, colour figs 79, 79.1, 79.2, 79.3, 79a, 79b, 79b.1, 79b.2, 79c); left elytron (Horn 1908c, fig. 114); aedeagus (Cassola, this paper, fig. 127).

DISTRIBUTION. Zimbabwe. "Zambesia" (Péringuey 1896, M. mashuna). Aberdeen (BVNC). Mashonaland West: Mashonaland (Péringuey 1894, Myrmecoptera mashuna; Horn 1904a, ssp. irregularis); Mashuna (CAS, MRAC); Umfuli River [=Mupfure-Sanyati River] (Péringuey 1896, M. dissepta; FCC). Mashonaland East: Salisbury [=Harare] (Péringuey 1896; Werner 2000a; FCC, MRAC, NCI, TMSA). Matabeleland North: 60 km N Bulawayo: Maram Posa rd (KWC). Midlands: Lower Gwelo (CROC, FCC); Chiredzi, nr Nandi (FCC); Mvuma, Gutu-Chatsworth rd (Werner 2000a; FCC, KWC); Balla-Balla [=Mbalabala, 20°27S-29°03E] (ABC); Turk Mine [19°43S-28°48E] (Werner 2000a; MRAC). Manicaland: Umtali [=Mutare] (Horn 1901, "var." completa; MRAC, TMSA); Mutare: Dorowa (Werner 2000a; FCC, KWC); Mutare: Nyazura (FCC); Rusape (JWC); Mpudzi River (FCC); Inyanadzi River (Horn 1903a). Matabeleland South: Plumtree (FCC, MRAC, NCI); Fort Tuli (Péringuey 1896, sub M. mima); Matopos NP (FCC); Middle Limpopo (DEI, NCI); Matabele: Hård af Seg (MRAC); Matabele (TMSA). Masvingo: Mushandike Sanctuary (FCC, VKC). Botswana. E Botswana (Wiesner 1992). South Africa. Northern Province: Pietersburg (FCC, TMSA). KwaZulu/Natal: Durban (CMNH); Driefontein (NCI).

REMARKS. Tipically *P. polyhirmoides* has a basal longitudinal stripe parallel to, but some distance from, the suture, and moreover a conspicuous apical spot across the suture. However, the pattern of elytral maculation may sometimes be different: specimens may lack any white spot or band (m. *mashuna*) or show traces of a subapical lunule in addition to the apical sutural spot (m. *completa* W.H.), while others may have a basal longitudinal stripe and a narrow subapical lunule, lacking the apical sutural spot (m. *dissepta* Pér.), or may lack the apical sutural spot and the basal longitudinal stripe, having just a narrow subapical lunule (m. *irregularis*). However, relationship with *P. marshallana* should be better examined.

PROEPIPLEURALIS W. Horn, 1926

Myrmecoptera pro-epipleuralis Horn, 1926b: 164.

Dromica egregia var. proepipleuralis; Horn 1940: 274.

Dromica proepipleuralis; Wiesner 1992: 64, Werner 2000a: 135.

Type locality. "Sashila-Fluß in Katanga".

ILLUSTRATIONS. Habitus (Burgeon 1937, pl. 1, fig. 6; Werner 2000a, colour figs 103, 103.1); left elytron (Burgeon 1937, p. 16; Horn 1940, pl. 17, fig. 15); aedeagus (Cassola, this paper, fig. 72).

DISTRIBUTION. <u>D. R. Congo</u>. *Shaba*: Riv. Sashila (Horn 1926b; DEI, MRAC); Tshibole, Kangoa, Sangatshila, Kafakumba (Horn 1929a; FCC, IRSNB, MRAC); Muteba, Kapanga, Lulua (Burgeon 1937; MRAC); Kikumba, Luashi, Sandoa, Lukoshi-Luco, Mukunkoto, Kalehe, Kyapomoka (MRAC); Kahehe (Werner 2000a).

Remarks. It is surprising that Walther Horn, in his latest paper, published posthumously (Horn 1940), considered *proepipleuralis* to be a subspecies of *egregia*.

PROFUGORUM Cassola & Miskell, 2001

Dromica profugorum Cassola & Miskell 2001: 25.

Foveodromica profugorum (comb. n.).

Type locality. "N.W. Tanzania: 8 km SE of Kumhasha".

Type specimen. Holotype 3 (MRAC!).

ILLUSTRATIONS. Habitus, aedeagus (Cassola & Miskell 2001); habitus (Werner 2000a, fig. 161, sub *Dromica horii*).

DISTRIBUTION. <u>Tanzania</u>. *Kigoma*: 8 km SE Kumhasha (Cassola & Miskell, 2001; MRAC); Kigoma (Cassola & Miskell, 2001; FCC). *Rukwa*: Mpanda: Sibweza nr Mpanda [38°30E-6°30S] (Werner 2000a, fig. 161, sub *horii*; Cassola & Miskell, 2001; KWC).

PROLONGATA W. Horn, 1903

Dromica (Myrmecoptera) bilunata subsp. prolongata Horn, 1903: 316.

Dromica bilunata prolongata, VI. Gruppe "bilunata"; Horn 1926a: 90.

Dromica bilunata prolongata; Wiesner 1992: 64, Werner 2000a: 138.

Dromica prolongata (b. sp.).

Type locality. "Inyanyadzi R. (Gazaland XI)".

Type specimens. " $3 \circ$ ": 2 $3 \circ$, 1 \circ (BMNH!).

ILLUSTRATIONS. Habitus (Werner 2000a, colour figs 107a, 107a.1, 107a.2); aedeagus (Cassola, this paper, fig. 102).

DISTRIBUTION. Zimbabwe. Penkridge (ABC). *Manicaland*: 15 km S Chipinge (FCC); Rupisi [N of Chisumbanje]: Niasuta River (Werner 2000; KWC); Inyanyadzi River (Werner 2000a; BMNH, DEI, FCC, MRAC).

Remarks. The much longer, straighter male aedeagus, as well as the longer apical part of the elytra behind the discal spot, clearly indicate that *prolongata* is a distinct species, instead of a *bilunata* form, and moreover that it belongs to a different species group (*limpopoiana-bertolonii*).

PROLONGATESIGNATA W. Horn, 1925

Dromica (Myrmecoptera) mesothoracica subsp. prolongate-signata Horn, 1925b: 136.

Dromica Erikssoni prolongate-signata, IX. Gruppe "specialis-limbata"; Horn 1926a: 91.

Dromica mesothoracica prolongatesignata; Wiesner 1992: 65, Werner 2000a: 146.

Dromica prolongatesignata (**b. sp.**).

Type locality. "Katanga, Elisabethville et Kapiri".

Type specimens. Number not given, but both sexes included (ZMB? MRAC?).

ILLUSTRATIONS. Left elytron (Burgeon 1937, p. 16); habitus (Werner 2000a, colour figs 121a, 121a.1). DISTRIBUTION. <u>D. R. Congo</u>. *Shaba*: Elisabethville [=Lubumbashi] (Horn 1925; Werner 2000a; DEI, FCC, MRAC); Kapiri (Horn 1925; Werner 2000a; DEI, MRAC); Musonoie (FCC); Jadotville [=Likasi] (MRAC); Mura (MRAC); Kinda (MRAC); Lukafu (MRAC); Shiniama (Burgeon 1937). Zambia. *North-Western*: Solwezi (FCC).

REMARKS. The supposed ssp. *prolongatesignata* has been described from the very same region (Elisabethville, Kapiri) as *mesothoracica*, and consequently it could hardly be retained as a valid geographical race. In fact, smaller size, different elytral markings and lack of the preapical discal spur would indicate that *prolongatesignata* deserves full specific status.

PSEUDOCLATHRATA Péringuey, 1893

Dromica pseudo-clathrata Péringuey, 1893: 74.

Dromica pseudoclathrata, IV. Gruppe "clathrata-Mauchi"; Horn 1926a: 86.

Dromica pseudoclathrata; Wiesner 1992: 62, Werner 2000a: 106.

Pseudodromica pseudoclathrata (comb. n.).

Type locality. "Transvaal (no exact locality)".

Type specimen. Female ("Male unknown"): holotype \$\mathbb{Q}\$ (SAM!).

ILLUSTRATIONS. Habitus (Horn 1940, pl. 11, fig. 2; Werner 2000a, colour figs 74, 74.1, 74.2); aedeagus (Cassola, this paper, fig. 118).

DISTRIBUTION. <u>Botswana</u>. "Sogosse, O. Bechuanaland" (DEI); Kalahari (DEI). <u>South Africa</u>. Transvaal (Péringuey 1893); Doornfontein (TMSA). *Gauteng*: Hammanskraal (TMSA). *Northern Province*: Nylstroom (TMSA); 10 km NE Nylstroom [24°38S-28°29E] (FCC, NCI); Warmbaths (Werner 2000a; KWC, NCI, TMSA); Naboomspruit (Werner 2000a; FCC, MRAC); Waterberg: Geelhoutbushfarm [24°22S-27°33E] (FCC, TMSA); Messina Hart's Farm (TMSA); Zebedela (TMSA); Lapalala NR [23°51S-28°17E] (NCI); Naboomspruit (TMSA); Chuniespoort: Strydpoort (TMSA). *Mpumalanga*. Barberton (BMNH, FCC, TMSA). <u>Swaziland</u>. Hlane NP [26°15S-31°52E] (EAC, FCC).

PSEUDOCOARCTATA W. Horn, 1925

Dromica (Cosmema) pseudo-coarctata Horn, 1925a: 23.

Dromica pseudo-coarctata, XV. Gruppe "transitoria-auropunctata-elegantula"; Horn 1926a: 94.

Dromica pseudocoarctata; Wiesner 1992: 68, Werner 2000a: 181.

Type locality. "Vumbu Mts. (S. Rhodesia)".

Type specimens. "2 99,233": 1 3,19 (DEI!).

ILLUSTRATIONS. Habitus (Werner 2000a, colour figs 181, 181.1, 181.2); aedeagus (Cassola, this paper, fig. 34).

DISTRIBUTION. Zimbabwe. Manicaland: Vumba Mts. [S of Mutare] (Horn 1925b, Werner 2000a; DEI, FCC, TMSA); Nyanga (Werner 2000a; JWC, KWC).

Remarks. The moderately inflated labial palpi may help to distinguish this species from *coarctata*. The specimens from Nyanga appear to be nearly identical to *pseudocoarcata* syntypes, but their pronotal sculpture is slightly different.

PSEUDOFURCATA W. Horn, 1922

Dromica (Cosmema) coarctata pseudofurcata Horn, 1922: 95.

Dromica coarctata pseudofurcata, XIII. Gruppe "coarctata"; Horn 1926a: 93.

Dromica coarctata var. pseudofurcata; Horn 1940: 275.

Dromica coarctata pseudofurcata; Wiesner 1992: 66, Werner 2000a: 158.

Dromica pseudofurcata (b. sp.).

Type locality. "Willowmore (Kapland: Dr. Brauns coll. Januar-März)".

Type specimens. Number not given, but both sexes included (ZMB?).

ILLUSTRATIONS. Habitus (Werner 2000a, colour figs 138c, 138c.1); left elytron (Horn 1922, figs 3, 4; Horn 1940, pl. 19, fig. 6); aedeagus (Cassola, this paper, fig. 30).

DISTRIBUTION. <u>South Africa</u>. <u>Western Cape</u>: "Capland" (MRAC); Karoo: Zwartskraal Farm [33°10S-22°32E] (FCC, TMSA). <u>Eastern Cape</u>: Willowmore (Horn 1922; Werner 2000a; FCC, TMSA). <u>KwaZulu/Natal</u>: Durban (CMNH). <u>Lesotho</u>. Basutoland: Mamates (MRAC).

REMARKS. The larger size and the distinctive elytral pattern, which is more reminiscent of that of *furcata*, indicate *pseudofurcata* as being a distinct species, not a subspecies of *coarctata*.

PSEUDOGIGANTEA Péringuey (in collectione)

Dromica pseudogigantea Péringuey, i.l.

Nomen i.l., pinned by Péringuey on the holotype specimen of *P. pseudoclathrata*; Cochrane 1995: 294.

PSEUDOSETOSULA Cassola, 1983

Dromica pseudosetosula Cassola, 1983a: 347.

Dromica pseudosetosula; Wiesner 1992: 62, Werner 2000a: 105.

Pseudodromica neavei pseudosetosula (comb. n., stat. n.).

Type locality. "Zambia: Solwezi District, Solwezi, Lusala, N'Changa. Zaire (Shaba): Tumbwe, 35 km W Elisabethville, Lubumbashi, Kanzenze".

Type specimens. Holotype \Im (BMNH!); allotype \Im (BMNH!); 15 \Im \Im , 13 \Im \Im (BMNH!); 1 \Im (DEI!); 5 \Im \Im , 6 \Im (FCC!); 1 \Im (ITZ!); 1 \Im (MRAC!).

ILLUSTRATIONS. Habitus (Werner & Dudley 1998, fig. 2; Werner 2000a, colour figs 72, 72.1); aedeagus (Cassola 1983, fig. 1a).

PSEUDOTENELLA Cassola, this paper

Dromica pseudotenella Cassola, this paper

Type locality. "South Africa (KwaZulu-Natal): Ndumu".

Type specimens. Holotype \Im (FCC!); allotype \Im (FCC!); 2 \Im \Im , 3 \Im \Im (FCC!); 1 \Im , 3 \Im \Im (KWC!); 7 \Im \Im , 5 \Im \Im (PSC!).

ILLUSTRATIONS. Habitus, labrum, aedeagus, left elytron (Cassola, this paper, figs 13-17).

DISTRIBUTION. <u>South Africa</u>. *KwaZulu/Natal*: 6 mi S Pongola (FCC); 20 km E of Magudu (KWC, PSC); Ndumu GR (FCC, PSC). <u>Swaziland</u>. 25 km E (KWC, FCC); 23 km ESE Piggs Peak (FCC, PSC).

PUNCTATISSIMA W. Horn, 1929

Dromica gracilis punctatissima Horn, 1929a: 316.

Dromica punctatissima; Cassola 1986: 350.

Dromica punctatissima; Wiesner 1992: 67, Werner 2000a: 172.

Foveodromica punctatissima (comb. n.).

TYPE LOCALITY. "Katanga".

Type specimen. "1 ♂" (DEI!).

ILLUSTRATIONS. Habitus (Werner 2000a, colour figs 159, 159.1); aedeagus (Cassola 1986b, p. 351, fig. 4C).

DISTRIBUTION. <u>D. R. Congo</u>. *Shaba*: Katanga (Horn 1929a; Werner 2000a; DEI); Zilo (Cassola 1986b; Werner 2000a; FCC, MRAC); Lubumbashi (Cassola 1986b; FCC, MRAC).

PURPURASCENS Bates, 1886

Dromica (Myrmecoptera) purpurascens Bates, 1886: 189.

Myrmecoptera purpurascens; Fleutiaux 1892: 36.

Dromica Mauchi purpurascens, IV. Gruppe "clathrata-Mauchi"; Horn 1926a: 87.

Dromica mauchii purpurascens; Wiesner 1992: 63, Werner 2000a: 114.

Pseudodromica mauchii purpurascens (comb. n.).

Type locality. "Mamboia, East Central Africa ... several examples".

Type specimens. Number not given, but both sexes included: 1 ♀ (MRAC!).

ILLUSTRATIONS. Habitus (Werner 2000a, colour figs 82b, 82b.1, 82b.2); elytra (Horn 1927, figs 43, 44, 48); left elytron (Horn 1906, pl. 1, figs 29-31; Horn 1940, pl. 22, fig. 7); live specimen (Cassola, this paper, colour fig. 159).

OUADRICOLLIS Chaudoir, 1864

Dromica quadricollis Chaudoir, 1864: 37.

Dromica quadricollis; Fleutiaux 1892: 34.

Junior synonym of *Dromica sculpturata*; Péringuey 1893: 76.

Junior synonym of *Dromica clathrata sculpturata*; Horn 1926a: 86, Wiesner 1992: 62, Werner 2000a: 106.

Junior synonym of *Pseudodromica sculpturata* (comb. n.).

TYPE LOCALITY. "...du pays des Zoulous; ... cap de Bonne-Espérance".

Type specimens. Number not given, but both sexes included (MNHN).

QUADRICOSTATA W. Horn, 1903

Dromica (Myrmecoptera) Bertoloni [sic!] subsp. quadricostata Horn, 1903: 319.

Dromica Bertolonii quadricostata, Gruppe "Bertolonii-nobilitata"; Horn 1926a: 88.

Dromica quadricostata; Wiesner 1992: 63, Werner 2000a: 119.

Type locality. "Transvaal (Pietersburg: Donckier)".

Type specimens. "♂♂" (not in DEI; ZMB?).

ILLUSTRATIONS. Habitus (Werner 2000a, colour figs 89, 89.1, 89.2, 89.3); left elytron (Horn 1940, pl. 23, fig. 3; pl. 18, fig. 12, sub "*D. Horni* Péring. i.l."); aedeagus (Cassola, this paper, fig. 98); live specimens (Werner 2000a, colour figs 89.6, 89.7; Cassola, this paper, colour figs 157, 158); habitat

(Werner 2000a, figs 89.4, 89.5; Cassola, this paper, fig. 136).

DISTRIBUTION. South Africa. Koedoes River (TMSA). Northern Province: Louis Trichardt: Ben Lavin NR (Werner 2000a; DWBC, KWC, PSC); 20 km S Louis Trichardt (PSC); 22 km W Louis Trichardt (PSC); Blouberg MR (PSC); Makhutswe River: Ofcolaco (Werner 2000a; FCC, KWC); Klaserie (Werner 2000a; KWC); Hans Merensky NR [23°40S-30°39E] (FCC, NCI); Duiwelskloof: 50 km to Pietersburg (Werner 2000a; FCC, KWC); Zoutpansberg (TMSA); Thabina (TMSA); Gravelotte (TMSA); 7.5 km E Gravelotte [23°55S-30°40E] (DWBC); Leydsdorp (TMSA); Sedula nr Leydsdorp (TMSA); Shilouvane nr Leydsdorp (Werner 2000a, fig. 90, sub *D. costata*?; BMNH, DEI, FCC, MRAC, NCI, TMSA); Griffin Mine [nr Leydsdorp, 23°59S-30°31E] (FCC, TMSA); Pietersburg (Horn 1903a); Kruger NP: 20 km NE Shingwedzi (FCC). Mpumalanga: Low County (IPC, KWC); Lydenburg (TMSA).

Remarks. Some specimens may have a roundish discal spot near the front part of the apical lunule (m. *horni* W.H.), but apparently they are found occurring syntopically with normal, non-spotted specimens. Interestingly, specimens of *limpopoiana* too may sporadically present such a roundish discal spot (m. *speciosa* Pér.), which, however, is positioned slightly more in front than that of m. *horni*.

QUADRIGUTTATA Bates, 1886

Dromica (Cosmema) quadriguttata Bates, 1886: 189.

Dromica quadriguttata; Demoor 1886: 48.

Cosmema quadrigutta (sic!); Fleutiaux 1892: 36.

Senior synonym of Cicindela hexasticta; Horn 1926a: 155.

Senior synonym of Bennigsenium hexastictum; Wiesner 1992: 95, Werner 2000b: 17.

Type Locality. "... near Mamboia... East Central Africa".

Type specimen. "One female example taken ..." (BMNH? MNHN?).

QUINQUECOSTATA W. Horn, 1892

Dromica 5-costata Horn, 1922: 67.

Dromica quinquecostata; Fleutiaux 1892: 34, Péringuey 1893: 97, Péringuey 1896: 120.

Dromica quinquecostata, III. Gruppe "bicostata-octocostata"; Horn 1926a: 86.

Dromica quinquecostata; Wiesner 1992: 61, Werner 2000a: 103.

Pseudodromica quinquecostata (comb. n.).

Type locality. "Natal".

Type specimen. "1 ♂" (DEI!).

ILLUSTRATIONS. Left elytron (Horn 1940, pl. 21, fig. 3); habitus (Werner 2000a, colour figs 69, 69.1); aedeagus (Cassola, this paper, fig. 121).

DISTRIBUTION. <u>South Africa</u>. *KwaZulu/Natal*: Zululand (FCC, NCI); Hluhluwe GR: Zidonini area [28°11S-30°02E] (DWBC); Port Natal (Horn 1892a; Péringuey 1893; DEI); Empangeni (Horn 1940); Ntambanana [28°43S-31°45E] (NCI); Mkuzi GR [27°37S-32°03E] (FCC, NCI, TMSA); St. Lucia (Werner 2000a). <u>Mozambique</u>. *Maputo*: Delagoa Bay [=Maputo] (Werner 2000a; MRAC).

RAMIGERA Chaudoir (in collectione)

Dromica ramigera Chaudoir i. 1. (nomen i.l., pinned by Chaudoir on a specimen of furcata).

Junior synonym of Dromica furcata; Horn 1896b: 353, Horn 1910b: 165, Wiesner 1992: 65.

RAMIGERA Péringuey, 1893

Cosmema ramigera Péringuey, 1893: 93.

Dromica ramigera, X. Gruppe "laticollis-ramigera"; Horn 1926a: 91.

Dromica ramigera; Wiesner 1992: 65, Werner 2000a: 150.

TYPE LOCALITY. "Damaraland".

Type specimen. Male ("I have not seen any female example") (ZMB?).

ILLUSTRATIONS. Habitus (Werner & Wiesner 1994, fig. 20; Werner 2000a, colour fig. 128); left elytron (Horn 1940, pl. 18, fig. 5); aedeagus (Cassola, this paper, fig. 71).

DISTRIBUTION. Namibia. "Gaub." (DEI). *Kunene*: Damaraland (Péringuey 1893); Etosha NP: Namutoni (Werner & Wiesner 1994; Werner 2000a; KWC). *Outjo*: Aliefoth (Horn 1908b; DEI); Münsterland [20°14S-15°53E] (Werner & Wiesner 1994; SMNW); Outjo-Kalkfeld: 16-20 km S Outjo [20°14S-16°09E] (FCC). *Otjozondjupa*: Okoosomingo nr Otijwarongo [20°37S-17°08E] (Werner & Wiesner 1994; SMNW). *Otjikoto*: Tsumeb (DEI).

RAWLINSI Schüle & Werner, 2001

Dromica rawlinsi Schüle & Werner, 2001: 30.

Type locality. "Malawi: Chitipa District, Jembya Reserve".

Type specimens. Fifty-one specimens: holotype δ (CMNH); $\delta \delta$, 99 (CMNH, FCC!, KWC, PSC). Illustrations. Habitus (Schüle & Werner 2001, figs 9, 29); labrum, aedeagus, metaepisternum, lateral view of pronotum (Schüle & Werner 2001, figs 10, 11, 12, 20, 24).

DISTRIBUTION. Malawi. North: Jembya NR (Schüle & Werner 2001); 18 km SSE Chisenga [10°08S-35°27E] (Werner & Dudley 1998, sub *stutzeri* ssp.; Werner 2000a; Schüle & Werner 2001; CMNH, FCC); Wenia [10°07S-33°34E] (CMNH); Rumphi (Werner & Dudley 1998; Schüle & Werner 2001). REMARKS. Obviously a species of the *D. stutzeri* complex.

REDUCTA W. Horn, 1903

Dromica (Myrmecoptera) nobilitata subsp. reducta Horn, 1903c: 421.

Dromica nobilitata reducta, IV. Gruppe "clathrata-Mauchi", Untergruppe "Bertolonii-nobilitata"; Horn 1926a: 88.

Dromica nobilitata reducta; Wiesner 1992: 63, Werner 2000a: 122.

Type locality. "Luitpoldkette (Afr. or.)".

Type specimen. "1 \(\text{?" (DEI!).} \)

ILLUSTRATIONS. Habitus (Werner 2000a, colour figs 91a, 91a.1); left elytron (Horn 1908c, figs 118, 119; Horn 1940, pl. 17, figs 2-4).

REVOILI Fairmaire, 1882

Dromica Revoili Fairmaire, 1882: 6.

Dromica Revoili; Demoor 1886: 49.

Myrmecoptera Revoili; Fleutiaux 1892: 35.

"Myrmecoptera Revoili Fairm. ist = Cic. laeta Tatum \mathcal{P} "; Horn 1896b: 353.

Cicindela Revoili; Horn 1926a: 155.

Euryarthron Revoili; Rivalier 1957: 317.

Euryarthron revoili; Wiesner 1992: 60, Werner 2000a: 94.

Type Locality. Somalia (reference not seen).

Type specimens. 1 syntype (DEI!).

ILLUSTRATIONS. Habitus (Werner 2000a, colour figs 55, 55.1); left elytron (Horn 1908c, fig. 122;

Horn 1938, pl. 44, figs 23-24; Werner 1993b, fig. 5a,b).

RITSEMAE W. Horn, 1897

Myrmecoptera Ritsemae Horn, 1897c: 236.

Dromica spectabilis Ritzemai, IX. Gruppe "specialis-limbata"; Horn 1926a: 90.

Dromica spectabilis ritsemae; Wiesner 1992: 65, Werner 2000a: 144.

Type locality. "Blantyre, Africa Centrali Britannica".

Type specimens. "1 $\c 9$, $\c 3$ ": 1 $\c 9$ (DEI!).

ILLUSTRATIONS. Habitus (Werner 2000a, colour fig. 119a.1).

Remarks. Horn (1904a) has later considered ritsemae to be a subspecies of spectabilis: "Myrm.

Ritsemae m. scheint mir nur eine Rasse von M. spectabilis Pér. zu sein".

RITZEMAI W. Horn, 1926

Dromica spectabilis ritzemai Horn, 1926a: 90.

Incorrect subsequent emendation of *ritsemae*.

RUGOSA Bertoloni, 1858

Dromica rugosa Bertoloni, 1858: 305.

Junior synonym of *Dromica gigantea*; Fleutiaux 1892: 34.

Junior synonym of Dromica Bertolonii; Horn 1926a: 88.

Junior synonym of Dromica bertolonii; Wiesner 1992: 63, Werner 2000a: 118.

Type locality. "Reperit Eq. Fornasinius in ripis fluminis Magnárra provinciae Inhambanensis Mosambici".

Type specimens. "Pochi individui ...": 2 syntypes (MZUB: Tommasini & Marini 1988); 1 & (DEI!, labeled: "Mokambo-Bai, Mus. Bologne, Bertoloni; Syntypus").

ILLUSTRATIONS. Habitus (Bertoloni 1858, pl. 23, fig. 2; Tommasini & Marini 1988, tav. I, fig. 3; Werner 2000a, colour fig. 87.2, sub *bertolonii* s. str.).

SAUNDERSII Chaudoir, 1865

Dromica (Myrmecoptera) Saundersii Chaudoir, 1865: 51.

Myrmecoptera Saundersi; Fleutiaux 1892: 35, Péringuey 1893: 65.

Junior synonym of Myrmecoptera limbata; Péringuey 1896: 116.

Dromica Saundersi, VII. Gruppe "Saundersi-Junodi"; Horn 1926a: 90.

Junior synonym of *Dromica consimilis*; Wiesner 1992: 64 ("saundersi"), Werner 2000a: 141 ("saundersi").

Dromica saundersii (revised status).

Type locality. "... de la baie de Lagoa".

Type specimens. "Je connaie deux individus de cet insecte, l'un est au Musée britannique, l'autre m'a

été donné par M. W.W. Saunders ..." (BMNH, MNHN).

ILLUSTRATIONS. Left elytron (Cassola 1975, fig. 5); aedeagus (Cassola 1975, fig. 6).

REMARKS. Synonymy of *saundersii* under *consimilis* was established by Horn (1904a, 1910b, 1926a), who maintained Chaudoir's name for the species. I had already observed elsewhere (Cassola 1975) that, if such a synonymy will be confirmed, the species should instead be given Bertoloni's name, which has obviously priority. However, 2-3 different species at least appear to be involved in this group, because of the more or less dilated antennomeres 5-8, the shape of pronotum, the occurrence or lack of a humeral patch, and the fully black vs. partially testaceous labrum of females. In consideration of the uncertain status of *specialis* too (see below), *saundersii* is tentatively maintained here as a full species, but its geographical distribution needs to be determined.

SCHAUMI W. Horn, 1892

Myrmecoptera Schaumi Horn, 1892b: 220.

Dromica Schaumi, V. Gruppe "Bennigseni-egregia"; Horn 1926a: 89.

Dromica schaumi; Wiesner 1992: 64, Werner 2000a: 130.

Type locality. "Ein ♀ aus Ost-Afrika (Madinula) in meiner Sammlung; ein anderes aus Witu (Dana Fl.) in Berliner Museum".

Type specimens. $1 \ \ \ (DEI!); 1 \ \ \ (ZMB).$

ILLUSTRATIONS. Habitus (Werner 2000a, colour figs 98, 98.1, 98.2, 98.3, 98.4, 98.5, 98.6, 98.7, 98.d); left elytron (Horn 1908c, fig. 113; Horn 1940, pl. 17, fig. 16); pronotum (Horn 1940, pl. 16, figs 3, 5); aedeagus (Cassola, this paper, fig. 56); live specimens (Werner 2000a, colour fig. 98.9; Cassola, this paper, colour fig. 154); habitat (Werner 2000a, figs 98.8, 98.10; Cassola, this paper, fig. 152). DISTRIBUTION. D.R. Congo. Haut-Zaire: Mongapi nr Faradje (Burgeon 1937, Basilewsky 1948a). Kenya. Mtowambo (NMN). Nairobi: Nairobi (FCC). Rift Valley: Naivasha (NMN). Eastern: Kitui (NMN). Coast: Witu nr Lamu (Horn 1892b; Werner 2000a); Lower Tana-Sabaki (FCC); Malindi: Jilore Forest (Werner 2000a; KWC); Malindi (KWC); Malindi: Arabuko-Sokoke FR (NMN); Mlalewa Forest nr Lunga Lunga (FCC, NMN); Voi (Werner 2000a; KWC). Tanzania. "Trockenwald" nr Mtotohovu (Horn 1921). Kigoma: Kakonko nr Kibondo (Cassola & Miskell, 2001; FCC, JMC, MRAC). Tabora: Mahonde [=Mdabulo?, 6°59S-33°19E] (Horn 1921). Dodoma: Babati-Kondoa (KWC). Iringa: Iringa (KWC); 50-70 km W Iringa (Werner 2000a). Tanga-Pwani: Segera [38°30E-5°30S]-Chalinze [38°30E-6°35S] (Werner 2000a). Pwani: Madinula in coastal Tanzania (Horn 1892b; Kolbe 1897; Werner 2000a). Morogoro: Pugu Mts. [6°59S-37°49E] (Horn 1921); Mikumi (KWC); Ruhembe Valley [=Ruembe: 7°44S-37°08E] (Horn 1921). Mozambique. Cabo Delgado: "Pemba-Bay (Nyassa-land)" [=Porto Amélia] (Horn 1905, ssp. seticollis; Werner 2000a).

REMARKS. Average larger size and stronger pronotal sculpture clearly distinguish *schaumi* from *batesi*. In contrast, species of the *egregia* group show a much coarser pronotal striation. However, the whole *batesi-schaumi-egregia* group, with all their related species and forms, should be deeply reviewed. Werner (1999, 2000a) has recently raised *taruensis* to full specific status, as he personally collected it as syntopically occurring with *schaumi* at Voi (Tsavo). Two more "subspecies" at least, *globicollis* and *setosipennis*, and moreover probably *ertli* too, appear to deserve full specific status, also because of the apparently overlapping geographical ranges.

SCHUELEI Cassola, this paper

Dromica schuelei Cassola, this paper

Type locality. "South Africa (Northern Province): Louis Trichardt, Ben Lavin Nature Reserve".

Type specimens. Holotype \Im (TMSA!); allotype \Im (PSC!); $2 \Im \Im$, $2 \Im \Im$ (DWBC!); $2 \Im \Im$, $4 \Im \Im$ (FCC!); $1 \Im$, $1 \Im$ (KWC!); $8 \Im \Im$, $3 \Im \Im$ (PSC!).

ILLUSTRATIONS. Habitus, labrum, aedeagus, left elytron (Cassola, this paper, figs 8-12).

DISTRIBUTION. <u>South*Africa</u>. Kudu River (FCC). *Northern Province*: 30 km NW Pietersburg (PSC); Louis Trichardt: Ben Lavin NR (DWBC, FCC, PSC); 22 km W Louis Trichardt (PSC); 7.5 km E Gravelotte [23°55S-30°40E] (DWBC); Moorddrift [24.17S-28.58E] (FCC); "Koedoes Riv." (FCC); Griffin Mine [nr Leydsdorp, 23°59S-30°31E] (FCC).

SCROBICULATA Dohrn, 1887

Dromica scrobiculata Dohrn, 1887: 171.

Myrmecoptera scrobiculata; Fleutiaux: 1892: 35.

"Eine eigene Art 'scrobiculata Dohrn' existirt nicht; loco citato giebt Dohrn an, dafs *Dromica* scrobiculata Bert. i.l. = *Bertolonii* Thoms. = *rugosa* Bert. sei"; Horn 1893: 332.

Junior synonym of Myrmecoptera Bertolonii: Gruppe "Bertolonii-nobilitata"; Horn 1910: 162.

Junior synonym of Dromica bertolonii; Wiesner 1992: 63.

Type Locality. Not indicated.

Type specimens. Number and sex not given (PASW?).

SCULPTURATA Boheman, 1848

Dromica sculpturata Boheman, 1848: 17.

Dromica sculpturata; Fleutiaux 1892: 34.

Dromica clathrata sculpturata, IV. Gruppe "clathrata-Mauchi"; Horn 1926a: 86.

Dromica clathrata var. sculpturata; Horn 1940: 276.

Dromica clathrata sculpturata; Wiesner 1992: 62, Werner 2000a: 106.

Pseudodromica sculpturata (revised status, comb. n.)

Type locality. "Habitat rarius in Caffraria interiore".

Type specimen. "♀" (NHRS?).

ILLUSTRATIONS. Habitus (Werner 2000a, colour figs 73.a, 73a.1); left elytron (Horn 1940, pl. 21, figs 6, 7); aedeagus (Cassola, this paper, fig. 116); live specimens (Cassola, this paper, colour figs 160, 161, 162).

DISTRIBUTION. <u>South Africa</u>. *Free State*: Harrismith: Sterkfontein Dam (CIC). *Mpumalanga*: White River (FCC). *KwaZulu/Natal*: "Zoulous" (Chaudoir 1864, sub *D. bisbicarinata* and *D. quadricollis*); Frere (Péringuey 1893); Durban (Péringuey 1893, sub *D. natalica*); Tugela (Werner 2000a; MRAC); Tugela Ferry (TMSA); Weenen (BMNH, TMSA); Estcourt (NCI); Cathedral Peaks FS [75 km SW Estcourt] (FCC, HFHC, TMSA); Vernon Crookes (CIC, CROC); Drakensberg Mts. (DLPC); Royal NP [28°46S-28°56E] (TMSA); 40 km NE Dundee: Walhalla Farm (FCC); Loteni NR (FCC, KWC, PSC).

REMARKS. Relationship with *clathrata* was discussed by Horn (1907). Smaller size, different elytral sculpture, and filiform vs. dilated antennae, indicate specific separation from *clathrata*.

SEMILEVIS W. Horn, 1897

Dromica (Cosmema) semilevis Horn, 1897a: 98.

Cosmema semilevis; Péringuey 1898: 310.

Dromica semilevis, XV. Gruppe "transitoria-auropunctata-elegantula"; Horn 1926a: 94.

"nur eine auf den Flügeldecken weniger skulpierte Rasse von C. gruti Chd."; Horn 1935a: 102.

Dromica semilevis; Horn 1940: 275, Wiesner 1992: 67, Werner 2000a: 178.

TYPE LOCALITY. "Zululand".

Type specimen. "1 ♂" (DEI!).

ILLUSTRATIONS. Habitus (Werner 2000a, colour fig. 173); left elytron (Horn 1940, pl. 20, fig. 8); aedeagus (Cassola, this paper, fig. 51).

DISTRIBUTION. <u>South Africa</u>. *KwaZulu/Natal*: Zululand (Horn 1897a; Péringuey 1898; DEI); St. Lucia (Werner 2000a; KWC).

REMARKS. In a later paper, Horn (1935a) considered *semilevis* to merely be a poorly punctate form of *grutii*, but in his latest paper (Horn 1940) he again considered them to be two distinct species. The recent fortunate collection of a male specimen near St. Lucia (Werner 2000a) seems to represent the second capture of *semilevis* after over one century.

SERIEPUNCTATA W. Horn, 1929

Dromica (Myrmecoptera) seriepunctata Horn, 1929a: 312.

Dromica Saundersi var. seriepunctata; Horn 1940: 275.

Dromica nigroplagiata seriepunctata; Basilewsky 1965: 142.

Dromica seriepunctata; Cassola 1986b: 338.

Dromica seriepunctata; Wiesner 1992: 64, Werner 2000a: 142.

Type locality. "Kinda".

Type specimens. Number not given, but both sexes included: lectotype 3 (DEI!); 6 3 3 2 9 (DEI!).

ILLUSTRATIONS. Habitus (Werner 2000a, colour fig. 114); left elytron (Horn 1940, pl. 18, figs 1-3 & pl. 19, fig. 3); aedeagus (Cassola, this paper, fig. 75).

DISTRIBUTION. <u>D. R. Congo</u>. *Shaba*: Kinda (Horn 1929a; Cassola 1986b; Werner 2000a; DEI); Kanzenze (Cassola 1986b; FCC, MRAC); Zilo (Werner 2000a).

SERIETUBERCULATA W. Horn, 1929

Dromica serietuberculata Horn, 1929: 314 ("novam in genere sectionem constituens").

Dromica serietuberculata; Wiesner 1992: 67, Werner 2000a: 167.

Type locality. "1 9, Kinda. ... 1 9, Kafakumba".

Type specimens. 2 99 (DEI!).

ILLUSTRATIONS. Habitus (Burgeon 1937, pl. 1, fig. 10; Werner 2000a, colour figs 152, 152.1, 152a, 152a.1, 152b).

DISTRIBUTION. <u>Angola</u>. *Lunda Norte*: Cacanda nr Dundo (Basilewsky 1965, ssp. *lundana*; Werner 2000a; FCC, MRAC). <u>D. R. Congo</u>. *Shaba*: Kinda (Horn 1929a; Burgeon 1937; DEI); Kafakumba (Horn 1929a; Werner 2000a; DEI, FCC, MRAC); Kapanga, Mukunkoto, Sandoa, Kikumba, Tshibamba, Dilolo, Luashi (Basilewsky 1965; MRAC); Musonoie (MRAC, TMSA); Lukumi (MRAC); Kanzenze (FCC); Zilo (CMNH, FCC); Kolugi (ABC); 18 km SW Elisabethville

[=Lubumbashi] (BMNH). <u>Zambia</u>. *North-Western*: Solwezi: Tayumba (Cassola 1980b, ssp. *hammondi*; Werner 2000a; BMNH, FCC).

SETICOLLIS W. Horn, 1905

Dromica Schaumi subsp. seticollis Horn, 1905: 48.

Dromica schaumi seticollis, V. Gruppe "Bennigseni-egregia"; Horn 1926a: 89.

Dromica schaumi seticollis; Wiesner 1992: 64, Werner 2000a: 133.

Type locality. "Pemba-Bay (Nyassa-land: II.1902, P.A. Sheppard)".

Type specimen. "1 3" (DEI!).

ILLUSTRATIONS. Habitus (Werner 2000a, fig. 98d, colour picture of holotype).

SETOSIPENNIS W. Horn, 1914

Dromica (Myrmecoptera) Schaumi subsp. setosipennis Horn, 1914a: 9.

Dromica Schaumi setosipennis, V. Gruppe "Bennigseni-egregia"; Horn 1926a: 89.

Dromica schaumi setosipennis; Wiesner 1992: 64, Werner 2000a: 132.

Dromica setosipennis (b. sp.).

Type locality. "Mpangwa (Deutsch Ostafrika: Ertl)".

Type specimen. "1 ?" (not in DEI: Döbler 1973).

ILLUSTRATIONS. Habitus (Werner 2000a, colour figs 98b, 98b.1); aedeagus (Cassola, this paper, fig. 58).

DISTRIBUTION. <u>Tanzania</u>. Mpangwa (Horn 1914a; Werner 2000a; DEI). Bihawana (Werner 2000a; DEI). *Iringa*: Tossamaganga (BMNH). *Singida*: Itigi (TMSA). *Tabora*: Ndala Mission [04°45S-33°15E] (BMNH). *Dodoma*: Mitundo (KWC).

Remarks. Morphological characters as well as range overlapping would suggest to raise *setosipennis* to full specific status.

SETOSULA W. Horn, 1909

Dromica (Myrmecoptera) setosula Horn, 1909a: 92.

Dromica setosula, IV. Gruppe "clathrata-Mauchi"; Horn 1926a: 86.

Dromica setosula; Wiesner 1992: 62, Werner 2000a: 104.

Pseudodromica setosula (comb. n.).

Type Locality. "Kwango-District (Africa centralis)".

Type specimen. "1 9" (DEI!).

ILLUSTRATIONS. Habitus (Burgeon 1937, pl. 1, fig. 5; Horn 1940, pl. 13, fig. 2; Werner 2000a, colour figs 71, 71.1); labrum, left elytron (Burgeon 1937, p. 15); aedeagus (Cassola 1983, fig. 1b); female genitalia (Deuve 1993, fig. 116).

DISTRIBUTION. <u>D. R. Congo</u>. *Shaba*: Kwango (Horn 1909a; Burgeon 1937; DEI); Elisabethville [=Lubumbashi] (Horn 1929a; Burgeon 1937; FCC, MRAC); Jadotville [=Likasi] (Cassola 1983a; Werner 2000a; MRAC); 12 km Elisabethville-Jadotville rd (FCC, MRAC); Kundelungu (Horn 1929a; Burgeon 1937; MRAC); Kapiri (Horn 1929a; Burgeon 1937); Lukafu (Burgeon 1937; MRAC); Lomami: Mwene-Ditu (Cassola 1983a; MRAC); Mutaka: Kakanda (Cassola 1983a; MRAC); Mura (Cassola 1983a; MRAC); Busumba (Cassola 1983a; MRAC); Kaniama (Cassola 1983a; FCC, MRAC). <u>Zambia</u>. "Brit. C. Afr.: Ubemba" (Cassola 1983a; BMNH); "Rhodesia"

(FCC). Central: Serenje (Cassola 1983a; BMNH).

SEXMACULATA Chaudoir, 1860

Dromica sexmaculata Chaudoir, 1860: 306.

Cosmema sexmaculata; Fleutiaux 1892: 36.

Dromica sexmaculata, XVI. Gruppe "sexmaculata-Helleri"; Horn 1926a: 94.

Dromica sexmaculata; Wiesner 1992: 68, Werner 2000a: 182.

Type locality. "Habitat in Africa australi, ad Delagoa bay".

Type specimens. "Les deux sexes" (MNHN).

ILLUSTRATIONS. Habitus (Péringuey 1893, pl. 2, fig. 8; Werner 2000a, colour figs 183, 183.1, 183.2, 183.3); left elytron (Horn 1940, pl. 18, fig. 16; Horn 1940, pl. 23, fig. 6; Cassola 1975, fig. 5); aedeagus (Cassola 1975, fig. 6; Cassola, this paper, fig. 35); live specimens (Werner 2000a, colour fig. 183.4; Cassola, this paper, colour fig. 143); habitat (Werner 2000a, fig. 186.3).

DISTRIBUTION. South Africa. Northern Province: Louis Trichardt (JPC); Louis Trichardt: Ben Lavin NR (Werner 2000a; PSC, DWBC); 22 km E Louis Trichardt (PSC); 30 km W Trichardtsdal: Downs Forest (ACBRI); Pietersburg: Malta Forest (FCC, NMN, TMSA); Ofcolaco: Makhutswe River (Werner 2000a; DWBC); Mica-Hoedspruit (Cassola 1975; FCC); Klaserie (FCC, TMSA); 2 km NE Klaserie [24°32S-31°02E]; 2 km E Klaserie [24°31S-31°02E]; 15 km E Klaserie: Guernsey Farm (FCC); Klaserie-Kampersrus (JWC); 7.5 km E Gravelotte [23°55S-30°40E] (DWBC); Shilouvane nr Leydsdorp (FCC, NCI); Chilovane (NCI, TMSA); Zoutpansberg: Thabina, 6 km W The Downs (DLPC); Kruger NP: S Letaba (FCC); Kruger NP: 15 km W jct Limpopo & Levuvhu Rivers (FCC). Mpumalanga: Lydenburg (TMSA); 20 km E Nelspruit (PSC); Low County (JPC); Kaapmuiden (HFHC); Three Sisters [20 km SW Kaapmuiden] (FCC, KWC, PSC); 10 km E Hectorspruit (PSC); Kruger NP: Skukuza nr Pretoriuskop (NCI); Kruger NP: Skukuza [24°59S-31°37E] (FCC); Kruger NP: Skukuza-Sabi River [24°57S-31°42E] (TMSA); Kruger NP: Pumbe Sands [24°13S-31°56E] (TMSA); Kruger NP: Skukuza-Malelaan (NCI). KwaZulu/Natal: Port Natal (Péringuey 1893, sub Cosmema Gruti); Dukuduku FR (FCC, TMSA); Entabeni (FCC, TMSA); Tembe Elephant Park (CIC); 20 km W Magudu (PSC); St. Lucia (JWC, VAC); St. Lucia: False Bay (PSC); St. Lucia: Cape Vidal (Wiesner 2001); Mkuzi GR (PSC, TMSA); Mkuzi River (FCC); Ndumu GR (BVNC, FCC, TMSA). Swaziland: Hlane NP [26°15S-31°52E] (EAC, FCC); N of Big Bend: Mzimpofu R. [26°42S-31°46E] (DWBC). Mozambique (Péringuey 1893, sub Cosmema simplex). Maputo: Delagoa Bay, Lourenço Marques [=Maputo] (Chaudoir 1860, 1864; Péringuey 1893, sub Cosmema Gruti; Werner 2000a; FCC, JWC, NCI); Tembé (Junod 1899; MRAC); Boane [26°11S-32°19E] (FCC, MSNC, SBC).

Remarks. The currently known geographical distributions of *sexmaculata* and its allied species have been recently determined by Cassola et al. (2000). However, *D. sexmaculata*, as it is presently understood, will probably turn out to include, when larger materials will be duly examined, one or two more distinct sister species. In particular, the specimens from Swaziland seem to represent a separate undescribed species.

SEXMACULATA Péringuey, 1893

Cosmema sex-maculata Chaud., Péringuey 1893: 85.

Var. of Cosmema citreo-guttata; Péringuey 1898: 308.

Junior synonym of Dromica citreoguttata; Horn 1926a: 95.

Dromica citreoguttata var. sexmaculata; Horn 1940: 276.

Junior synonym of Dromica citreoguttata; Wiesner 1992: 68, Werner 2000a: 183.

ILLUSTRATIONS. Habitus (Péringuey 1893, pl. 2, fig. 6); left elytron (Horn 1940, pl. 23, fig. 7).

SHEPPARDI W. Horn, 1907

Dromica (Myrmecoptera) spectabilis subsp. Sheppardi Horn, 1907: 331.

Dromica spectabilis Sheppardi, IX. Gruppe "specialis-limbata"; Horn 1926a: 91.

Dromica spectabilis sheppardi; Wiesner 1992: 65, Werner 2000a: 145.

Type locality. "prope Beiram...collecta".

Type specimens. Number not given, but both sexes included: 6 syntypes (DEI!).

ILLUSTRATIONS. Habitus (Werner 2000a, colour fig. 119b).

SIGRUNAE Werner, 1998

Dromica sigrunae Werner, 1998: 167.

Dromica sigrunae; Werner 2000a: 134.

Type locality. "Central Tanzania, Dodoma Province, between Babati and Kondoa".

Type specimens. Holotype 3 (TMSA); $1 \$ (EWC); $2 \$ (FCC!); $9 \$ (KWC); $1 \$ (JMCB); $1 \$ (JPC); $1 \$ (RNC); $1 \$ (PSC).

ILLUSTRATIONS. Habitus, labrum, aedeagus (Werner 1998, figs 4, 5); habitus (Werner 2000a, colour figs 100, 100.1).

DISTRIBUTION. <u>Tanzania</u>. *Dodoma*: Babati-Kondoa (Werner 1998); 30 km N Kondoa (Werner 1998, 2000a; FCC); Babati: 30 km to Kondoa (Werner 2000a); Babati: 30 km to Dodoma (Werner 2000a). REMARKS. Obviously a species of the *schaumi* group.

SIMILIS Cassola, 1980

Dromica similis Cassola, 1980a: 209.

Dromica similis; Wiesner 1992: 67, Werner 2000a: 176.

Type locality. "Angola: Cuche, within 100 km radius (North)".

Type specimens. Holotype \Im (CAS!); allotype \Im (CAS!); $4 \Im \Im$ (CAS!); $2 \Im \Im$ (FCC!).

ILLUSTRATIONS. Habitus, labrum, aedeagus (Cassola 1980a, fig. 3); habitus (Werner 2000a, colour fig. 169).

DISTRIBUTION. Angola. Cuando Cubando: N of Cuchi (Cassola 1980a, Werner 2000a; CAS, FCC).

REMARKS. Just the eight type specimens are known so far. Relationship with *pentheri* should be better investigated. However, colour of labrum, shape of hind lobe of pronotum, sculpture of head and pronotum, and elytral markings, would suggest them to be separate species.

SIMPLEX Bates, 1878

Dromica simplex Bates, 1878: 333.

Cosmema simplex; Fleutiaux 1892: 36, Péringuey 1893: 94.

Var. of Cosmema sexmaculata; Péringuey 1898: 308.

Dlc-F of *Dromica sexmaculata*, XVI. Gruppe "sexmaculata-Helleri"; Horn 1926a: 94.

Junior synonym of *Dromica sexmaculata*; Wiesner 1992: 68, Werner 2000a: 182.

102 CASSOLA

Type locality. "Mozambique".

Type specimen. "? " (MNHN? BMNH?).

SOMALICA Cassola, 1989

Dromica somalica Cassola, 1989: 121.

Dromica somalica; Wiesner 1992: 63, Werner 2000a: 119.

Type Locality. "Somalia (Benadir): Afgoi, Agricultural Research Institute".

DISTRIBUTION. <u>Somalia</u>. *Benadir*: Afgoi (Cassola 1989, Cassola & Miskell 1990; FCC, JMC, JWC, KWC, RNC, MRAC, TMSA, WDSC); Lower Uebi (Cassola 1989, Cassola & Miskell 1990; FCC). REMARKS. The type series only is known so far.

SOROR W. Horn, 1935

Cosmema soror Horn, 1935b: 163.

Dromica soror; Wiesner 1992: 67, Werner 2000a: 175.

Foveodromica soror (comb. n.).

TYPE LOCALITY. "Benguella".

Type specimen. Holotype ♀ (DEI!).

ILLUSTRATIONS. Habitus (Horn 1940, pl. 15, fig. 1; Werner 2000a, fig. 164; Werner 2000a, fig. 191.1, sub *D. foveicollis*).

DISTRIBUTION. Angola. Benguela: Benguella (Horn 1935b, Werner 2000a; DEI).

Remarks. Just the female holotype specimen appears to be known so far (Cassola 1980a).

SPECIALIS Péringuey, 1904

Dromica (Cosmema) specialis Péringuey, 1904: 448.

Dromica specialis, IX. Gruppe "specialis-limbata"; Horn 1926a: 90.

Dromica specialis; Wiesner 1992: 65, Werner 2000a: 143.

Type Locality. "Transvaal (Shilouvane)".

Type specimen. "3" (depository unknown).

ILLUSTRATIONS. Habitus (Werner 2000a, colour fig. 118).

DISTRIBUTION. South Africa. Northern Province: Shilouvane nr Leydsdorp (Péringuey 1904).

REMARKS. Several puzzling specimens (from Shilouvane, Zoutpansberg, Hluhluwe, Ndumu GR, Delagoa Bay and Gazaland) have been ranged under *consimilis*, but such identification has to be taken as provisionally only, because these specimens show similarly dilated antennomeres 5-8 as *consimilis*, but a differently shaped, more raised, behind restricted pronotum, and they could well be *specialis*. However, Péringuey (1904) had compared this species to such different species as *foveolata* and *granulata*. Relationships of *consimilis*, *saundersii* and *specialis* should therefore be investigated, based on careful examination of all type specimens. It may be that *specialis* will even prove to be a junior synonym of *saundersii*, but the whole group gives the impression of including 2-3 different species at least, because of the more or less dilated antennomeres 5-8, the shape of

pronotum, the occurrence or lack of a humeral patch, and the fully black vs. partially testaceous labrum of females. In consideration of the uncertain status of *saundersii* too (see below), *specialis* is tentatively maintained here as a full species, but its geographical distribution needs to be determined.

SPECIOSA Péringuey, 1896

Myrmecoptera speciosa Péringuey, 1896: 120.

Compl-F of Dromica limpopoiana; Horn 1926a: 90.

Dromica limpopoiana speciosa; Wiesner 1992: 64, Werner 2000a: 139.

Junior synonym of *Dromica limpopoiana* (syn. n.)

TYPE LOCALITY. "Zambesia (Buluwayo)".

Type specimens. Number not given, but both sexes included; 1 3 (SAM!).

ILLUSTRATIONS. Habitus (Werner 2000a, figs 109a, 109a.1, colour pictures); left elytron (Horn 1940, pl. 17, figs 17, 18).

SPECTABILIS Péringuey, 1893

Myrmecoptera spectabilis Péringuey, 1893: 64.

Dromica spectabilis, IX. Gruppe "specialis-limbata"; Horn 1926a: 90.

Dromica spectabilis; Wiesner 1992: 65, Werner 2000a: 144.

Type locality. "Zambezia".

Type specimen. "Male"; 1 & (DEI!).

Illustrations. Habitus (Werner 2000a, colour figs 119, 119.1, 119a.1, 119b); aedeagus (Cassola, this paper, fig. 89).

DISTRIBUTION. Malawi. South: Blantyre (Horn 1897c, ssp. ritsemae; Werner 2000a); Limbe (VAC); Mulanje (Wiesner 1992); Mpatamaga: Shire River (VAC). Zimbabwe. "Zambezia" (Péringuey 1893). Matabeleland South: Sawmills [19°35S-28°02E] (FCC); S of Bulawayo [20°30S-29°02E] (DWBC). Mashonaland East: Darwendale SR [17°43S-30°33E] (MRAC). Midlands: Gweru: Nalatale Ruins (FCC); Mvuma, Gutu-Chatworth rd (FCC); 30 km N Triangle: Chiredzi (FCC). Manicaland: Umtali [=Mutare] (Horn 1901; FCC, MRAC, NCI); Mpudzi River (Horn 1903a, sub ritsemae); Rupisi (N of Chisumbanje): Niasuta River (Werner 2000a); Mt. Chirinda (Horn 1903a, sub ritsemae). Masvingo: Lake Mutirikwi (KWC). Botswana. East: 110 km S Francistown [22°03S-27°16E] (BVNC, NCI). South Africa. Free State: Bothaville (TMSA). Northern Province: Gravelotte (TMSA); Leydsdorp (FCC, TMSA); Griffin Mine [nr Leydsdorp, 23°59S-30°31E] (TMSA). Mpumalanga: Barberton: Farm Alfa (FCC). Mozambique. Sofala: Beira (Horn 1907, ssp. sheppardi; Werner 2000a). Zambesia: Gilé NR [Reserva do Gili]: Nakalolo, Namurroa (FCC). REMARKS. Two, possibly three species appear to be included in the spectabilis-complex, as important differences are noticeable in shape of pronotum, length of marginal band of elytra, and colour of labrum. The supposed subspecies ritsemae and sheppardi should also be revisited, as they could well

SPINIPENNIS W. Horn, 1929

represent separate full species.

Dromica gracilis spinipennis Horn, 1929a: 317.

Dromica spinipennis; Cassola 1986b: 349.

Cassola Cassola

Dromica spinipennis; Wiesner 1992: 67, Werner 2000a: 172.

Foveodromica spinipennis (comb. n.).

TYPE LOCALITY. "Katanga".

Type specimen. "1 ♀" (DEI!).

ILLUSTRATIONS. Habitus (Werner 2000a, colour figs 158, 158.1).

DISTRIBUTION. <u>D. R. Congo</u>. *Shaba*: Katanga (Horn 1929a; Werner 2000a; DEI); Kapiri (Cassola 1986b; Werner 2000a; MRAC).

REMARKS. The female specimen figured by Werner (2000a, fig. 158.1) as being a "syntypus" is in reality the single holotype, while the specimen indicated as the species' "allotypus" (fig. 158) is instead a male which was not designated by Horn (1929a) in the type series. These two specimens only are known so far.

STALSI Cassola, this paper

Dromica stalsi Cassola, this paper.

Type locality. "South Africa (Northern Province): Luipershoek Farm, near Roossenekal".

Type specimens. Holotype ♀ (NCI!); paratype ♀ (FCC!).

ILLUSTRATIONS. Habitus, labrum (Cassola, this paper, figs 6-7).

DISTRIBUTION. <u>South Africa</u>. *Mpumalanga*: Luipershoek Farm nr Roossenekal [25°07S-29°50E] (FCC, NCI).

REMARKS. Just the two female type specimens are known so far.

STRANDI W. Horn, 1914

Dromica (Cosmema) Strandi Horn, 1914a: 11.

Dromica Strandi, XV. Gruppe "transitoria-auropunctata-elegantula"; Horn 1926a: 94.

Dromica strandi; Wiesner 1992: 67, Werner 2000a: 170.

Foveodromica strandi (comb. n.).

Type locality. "Südost Angola".

Type specimen. "1 9" (DEI!).

ILLUSTRATIONS. Habitus (Werner 2000a, colour figs 155.1, 155a).

DISTRIBUTION. <u>Angola</u>. *Cuando Cubango*?: "Angola or. mer." (Horn 1914, Werner 2000a; DEI); "SO da Província de Angola" (Ferreira 1965). <u>R.P. Congo</u>: *Shaba*: Kawa River (Horn 1929a, ssp. *crebrepunctata*; Werner 2000a).

Remarks. Valididy of ssp. *crebrepunctata*, also described based on a single female specimen only, is doubtful. Until better information, it is considered to be merely a junior synonym. Two female specimens in all are apparently known so far (Cassola 1980a).

STUTZERI W. Horn, 1913

Dromica (Myrmecoptera) Stutzeri Horn, 1913: 272.

Dromica Stutzeri, IX. Gruppe "Stutzeri"; Horn 1926a: 91.

Dromica stutzeri; Wiesner 1992: 65, Werner 2000a: 149.

Type locality. "Katanga, Elizabethville".

Type specimens. Number not given, but both sexes included: 1 ♀ (DEI!; lectotype: Schüle & Werner 2001); 3 ♂ ♂ (DEI!; paralectotypes: Schüle & Werner 2001); 4 ♂ ♂ (MRAC!; paralectotypes: Schüle

& Werner 2001).

ILLUSTRATIONS. Habitus (Werner 2000a, colour figs 126, 126.1, 126.2, 126.3, 126.4; Schüle & Werner 2001, figs 1, 27); left elytron, labrum (Burgeon 1937, p. 17); labrum, aedeagus, metepisternum, lateral view of pronotum (Schüle & Werner 2001, figs 2, 3, 4, 18, 22).

DISTRIBUTION. <u>D. R. Congo</u>. *Shaba*: Elisabethville [=Lubumbashi] (Horn 1913; Burgeon 1937; Werner 2000a; Schüle & Werner 2001; ABC, DEI, FCC, JPC, JWC, MRAC); Jadotville [=Likasi] (Werner 2000; Schüle & Werner 2001; MRAC); Lukuni (Schüle & Werner 2001; MRAC); Mura (Schüle & Werner 2001; MRAC); Lulua: Kafakumba (Basilewsky 1948, ssp. *luluana*; Werner 2000a; Schüle & Werner 2001; FCC, MRAC); Kapanga (ssp. *luluana*; Burgeon 1937; Schüle & Werner 2001; MRAC). <u>Zambia</u>. *Copperbelt*: Nchanga [12°31S-27°52E] (TMSA). *Northern*: Mweru-Wantipa (Schüle & Werner 2001).

REMARKS. The taxonomic placement of *stutzeri* is still to be cleared, and moreover some puzzling populations occur which may well prove to be distinct species.

SUTURALIS Putzeys, 1880

Dromica suturalis Putzeys, 1880: 25.

Dromica suturalis; Demoor 1886: 48.

Cosmema suturalis; Fleutiaux 1892: 37.

"Eine Myrmecoptera-Form"; Horn 1893: 332.

Cicindela suturalis; Wellman & Horn 1908: 510.

Cicindela suturata W. Horn, 1915: 277 (substitution name); Horn 1926a: 158.

Trichotaenia suturalis; Rivalier 1957: 341, Cassola 1983b: 692.

Trichotaenia suturata; Wiesner 1992: 98, Werner 2000b: 31.

Trichotaenia suturalis (revised combination).

TYPE LOCALITY. Locality non given, but holotype labelled "Huilla (Lobo d'Avila)" (Basilewsky 1960, Cassola 1983b).

Type specimen. Holotype 3 (MBL).

ILLUSTRATIONS. Habitus (Werner 2000b, colour fig. 211); left elytron (Horn 1938, pl. 46, fig. 12).

TARSALIS W. Horn, 1898

Myrmecoptera tarsalis Horn, 1898b: 103.

Dromica egregia tarsalis, V. Gruppe "Bennigseni-egregia"; Horn 1926a: 88.

Dromica egregia tarsalis; Wiesner 1992: 63, Werner 2000a: 125.

Dromica tarsalis (revised status).

Type locality. "German East Africa...Mpwapwa".

Type specimens. "3 るる": 1 る (DEI!).

ILLUSTRATIONS. Habitus (Werner 2000a, colour figs 94a, 94a.1, 94a.2, 94a.3, 94a.4, 94a.5, 94a.6, 94a.7); aedeagus (Cassola, this paper, fig. 62).

DISTRIBUTION. <u>Tanzania</u>. *Tabora*: Ndala Mission [33°15E-04°45S] (BMNH). *Rukwa*: Mishamu nr Mpanda (VAC). *Mbeya*: Madibira [34°30E-8°12S] (MRAC); Vwawa (Werner 2000a; KWC); Rujewa (MSNC); Usangu (BMNH). *Dodoma*: Mpwapwa (Horn 1898b, 1910a; Werner 2000a). *Iringa*: Tossamaganga nr Iringa (BMNH). *Coast*: Dar-es-Salaam (FCC). *Ruvuma*: Kigonsera (Horn 1907, ssp. *brevinuda*; Werner 2000a; FCC, MCZR, MRAC); Songea (KWC); 30 km W Songea

106 CASSOLA

(Werner 2000a; KWC); 50 km N Songea (Werner 2000a). *Lindi*: Lindi (Horn 1899b, sub *M. jordani*; Werner 2000a; MRAC). *Mtwara*: Lukuledi [38°30E-10°30S] (Horn 1910a). <u>Zambia</u> (new country record). *Northern Province*: Abercorn [=Mbala] (BVNC); Luena [10°39S-30°12E] (MRAC). <u>Malawi</u>. *North*: Chikala FR (Werner & Dudley 1998). *South*: Zomba (Werner & Dudley 1998); Zomba: upper Shire River (Horn 1899b, sub *M. jordani*); Namitombo River: Mt. Zomba (Werner & Dudley 1998; MRAC, VAC); Blantyre (Horn 1897, ssp. *ritsemae*; Werner 2000a).

REMARKS. See discussion under *egregia*. If future research shows typical *tarsalis* to inhabit central and north-eastern Tanzania, *jordani* and *brevinuda* would likely turn out to be southern and southwestern subspecies of *tarsalis*.

TARUENSIS Kolbe, 1897

Myrmecoptera schaumi Var. taruensis Kolbe, 1897: 348.

Dromica Schaumi taruensis, V. Gruppe "Bennigseni-egregia"; Horn 1926a: 89.

Dromica schaumi taruensis; Wiesner 1992: 64.

Dromica taruensis; Werner, 1999: 15, Werner 2000a: 133.

Type locality. "bei Taru im Hinterlande von Mombassa".

Type specimens. Number not given, but both sexes included (ZMB?).

ILLUSTRATIONS. Habitus (Werner 2000a, colour figs 99, 99.1, 99.2); left elytron (Horn 1908c, fig. 162); pronotum (Horn 1940, pl. 16, fig. 4); aedeagus (Cassola, this paper, fig. 57); habitat (Werner 2000a, fig. 98.8).

DISTRIBUTION. <u>Kenya</u>. *Coast*: Taru, inland of Mombasa (Kolbe 1897; Werner 1993a, 2000a); "Kilimandscharo bis Mombassa" (Horn 1910b); Voi (Werner 2000a; FCC); 10 km SE Voi (Werner 1993a, sub *D. orbachi*); 30 km SE Voi (FCC); Taita: Mwatate (Werner 1993a; FCC).

REMARKS. Werner (1999, 2000a) has recently raised *taruensis* to full specific status, as he personally collected it as syntopically occurring with *schaumi* at Voi (Tsavo). However, the whole *batesi-schaumi-egregia* group, with all their related species and forms, should be deeply reviewed.

TENELLA Péringuey, 1893

Myrmecoptera tenella Péringuey, 1893: 63.

Cosmema tenella; Péringuey 1896: 100.

Dromica tenella, XV. Gruppe "transitoria-auropunctata-elegantula"; Horn 1926a: 93.

Dromica tenella; Wiesner 1992: 66, Werner 2000a: 162.

Type Locality. "... near Barberton (Transvaal)".

Type specimen. "One male example": holotype ♂ (DEI!).

ILLUSTRATIONS. Habitus (Junod 1899, pl. V, fig. 4; Werner 2000a, colour figs 144, 144.1); left elytron (Horn 1940, pl. 20, fig. 3; Cassola 1975, fig. 5); aedeagus (Cassola 1975, fig. 6; Cassola, this paper, fig. 46); live specimen (Werner 2000a, colour fig. 144.2); habitat (Werner 2000a, figs 184.2, 186.3). DISTRIBUTION. Zimbabwe. Manicaland: Enkeldorn [19°25S-30°55E] (NCI); Chilimanzi NR [19°35S-30°45E] (NCI). Masvingo: 30 mi. S Fort Victoria [=Masvingo] (Cassola 1975; FCC); Lake Mutirikwi (FCC, KWC, PSC). South Africa. Koedoes River (TMSA). Northern Province: Luis Trichardt (FCC, PSC); Louis Trichardt: Ben Lavin NR (Werner 2000a; DWBC, PSC); 22 km W Louis Trichardt (PSC); Ofcolaco: Makhutswe River (Werner 2000a; DWBC, KWC); 3.5 km S Makhutswi R. [24°12S-30°32E] (DWBC); Klaserie (Werner 2000a; PSC); 2 km NE Klaserie

[24°32S-31°08E] (DWBC); 15 km E Klaserie: Guernsey Farm (ACBRI, FCC, HFHC); Gravelotte (TMSA); Mica-Hoedspruit (Cassola 1975; FCC); 30 km SE Mica, 63 km S Tzaneen (TMSA); Leydsdorp (PSC); Griffin Mine [nr Leydsdorp, 23°59S-30°31E] (TMSA). *Mpumalanga*: Kruger NP (AVC-BMNH, FCC, HFHC, MHC, TMSA); Kruger NP: 16 km SW Lower Sabie [25°10S-31°47E] (FCC); Kruger NP: Skukuza (FCC); 10 km E Hectorspruit (PSC); Hectorspring nr Komatipoort (Cassola 1975; FCC); 20 km E Nelspruit (FCC, KWC, PSC); Barberton (Péringuey 1893; DEI, FCC, KWC, PSC, TMSA); Kaapmuiden (HFHC); Three Sisters [20 km SW Kaapmuiden] (FCC, KWC, PSC, TMSA); 3 km NE Mananga nr the Swaziland border (PSC, FCC). Mozambique [several records to be re-checked, due to possible muddle with *pseudotenella*]. *Maputo*: Delagoa Bay [=Maputo] (Junod 1899; FCC, IRSNB, JPC, MCZR, MRAC); Tembé (Junod 1899); env. Boane (SBC); Boane [dam S of] (MSNC).

Remarks. The recent discovery of *pseudotenella* (see above) would indicate that under *tenella* two, possibly three species are apparently involved in. Or may be *tenella* would prove itself to be highly variable. Specimens in collections should be duly re-examined for proper identification., and more material is definitely needed to ascertain the real situation.

TENELLULA W. Horn, 1903

Dromica (Cosmema) tenellula Horn 1903a: 317.

Dromica tenellula, XV. Gruppe "transitoria-auropunctata-elegantula"; Horn 1926a: 93.

Dromica tenellula; Wiesner 1992: 66, Werner 2000a: 162.

Type locality. "Mt. Chirinda (Gazaland...)".

Type specimens. Number not given, but both sexes included: $2 \ 3 \ 3 \ 9 \ 9 \ (DEI!)$.

ILLUSTRATIONS. Habitus (Werner 2000a, colour fig. 143); left elytron (Horn 1940, pl. 20, fig. 2); aedeagus (Cassola, this paper, fig. 43).

DISTRIBUTION. Zimbabwe. Manicaland: Mt. Chirinda (Horn 1903a; DEI, MRAC).

Remarks. No other specimens or further localities are known so far. The type locality was supposed to lie in Mozambique ("Gazaland") by Werner (2000a).

TERMITOPHILA Schüle & Werner, 2001

Dromica termitophila Schüle & Werner, 2001: 32.

Type locality. "Tanzania, Dodoma Prov., near Mitundo"

Type specimens. "More than 50 $\eth \eth$ and $\Im \Im$ ": holotype \eth (DEI); $\eth \eth \Im \Im \Im (CMNH, DEI, FCC!, IRSNB, KWC, MRAC, NHMB, PSC, ZSM).$

ILLUSTRATIONS. Habitus (Schüle & Werner 2001, figs 13, 30); labrum, tip of elytra, aedeagus, metepisternum, lateral view of pronotum (Schüle & Werner 2001, figs 14, 15, 16, 17, 21, 25); live specimen (Schüle & Werner 2001, fig. 31).

DISTRIBUTION. Tanzania. Dodoma: Mitundo (Schüle & Werner 2001).

Remarks. Obviously a species of the *D. stutzeri* complex.

THOMASWIESNERI Wiesner, 2001

Dromica thomaswiesneri Wiesner, 2001: 53.

Type Locality. "Maphiveni, Mlawula NR, Swaziland".

Type specimens. Three specimens: holotype ♂ (SMNS); 1 ♂ (JWC); 1 ♀ (SMNS).

ILLUSTRATIONS. Habitus, labrum, aedeagus (Wiesner 2001, figs 1-5).

DISTRIBUTION. Swaziland. Maphiveni: Mlawula NR (Wiesner 2001).

Remarks. This species was recently described based on five syntopical specimens only.

TRADUCENS W. Horn, 1903

Dromica (Cosmema) traducens Horn, 1903a: 316.

Dromica traducens, XV. Gruppe "transitoria-auropunctata-elegantula"; Horn 1926a: 93.

Dromica traducens; Wiesner 1992: 66, Werner 2000a: 165.

Type locality. "Up. Busi R. (Gazaland)".

Type specimen. "1 ♂" (DEI!).

ILLUSTRATIONS. Habitus (Werner 2000a, colour figs 148, 148.1); left elytron (Horn 1940, pl. 20, fig. 4).

DISTRIBUTION. <u>Zimbabwe</u>. <u>Manicaland</u>: Upper Buzi River valley (Horn 1903a; DEI). <u>Mozambique</u>. <u>Sofala</u>: Beira (Werner 2000a; FCC, NCI, MRAC, TMSA); "vallée du Pungoué, Guengère" [=Púngoe River] (FCC). <u>Zambesia</u>: Gilé NR [Reserva do Gili]: Nakalolo (FCC).

REMARKS. Unfortunately the single holotype specimen appears to miss its aedeagus. Horn (1935a) compared this species to *transitoria*, and stated the following: "Ein weiteres Unterscheidungsmerkmal liegt in der Form des Penis, welcher bei *C. traducens* in der distalen Hälfte einfach gerade, schmal zulaufend ist. (Penis von *P*. [sic!] *transitoria* Pér. [rectius: *concinna*] siehe Fig. 1)".

TRANSITORIA Péringuey, 1896

Cosmema transitoria Péringuey, 1896: 112.

Dromica transitoria, XV. Gruppe "transitoria-auropunctata-elegantula"; Horn 1926a: 93.

Dromica transitoria; Wiesner 1992: 66, Werner 2000a: 165.

TYPE LOCALITY. "Mozambique (Tembé)".

Type specimen. "Male": holotype & (SAM!).

ILLUSTRATIONS. Habitus (Junod 1899, pl. V, fig. 3; Werner 2000a, colour figs 149, 149.1, 149.2); left elytron (Horn 1940, pl. 20, fig. 5); aedeagus (Cassola, this paper, figs 53-54).

DISTRIBUTION. South Africa. Northern Province: Griffin Mine [nr Leydsdorp, 23°59S-30°31E] (TMSA). Mpumalanga: "Transvaal orientalis" (DEI); Lydenburg (Péringuey 1898); Kaapmuiden (HFHC); Kruger NP: Skukuza (FCC); Three Sisters [20 km SW Kaapmuiden] (FCC). Mozambique. Maputo: Tembé (Péringuey 1896; Junod 1899; DEI, SAM); Delagoa Bay, Lourenço Marques [=Maputo] (Werner 2000a; DEI, MRAC, TMSA); Porto Henrique (Gomes Alves 1954). REMARKS. Until better information, concinna and transitoria, because of important differences in elytral puncturation, are here considered to be two distinct species.

TRANSVAALENSIS Péringuey, 1893

Dromica tuberculata Var. Transvaalensis Péringuey, 1893: 79.

Dromica tuberculata transvaalensis, III. Gruppe "bicostata-octocostata"; Horn 1926a: 85.

Dromica tuberculata transvaalensis; Wiesner 1992: 61, Werner 2000a: 102.

Pseudodromica tuberculata transvaalensis (comb. n.).

Type Locality. "Transvaal (Lydenburg)".

Type specimens. Number not given, but both sexes included (ZMB?).

ILLUSTRATIONS. Habitus (Werner 2000a, colour fig. 67b).

transwaalensis Dokhtouroff, 1883

Dromica transwaalensis Doktouroff, 1883: 9.

Dromica transvaalensis; Demoor 1886: 48.

Cosmema transwaalensis; Fleutiaux 1892: 37.

Junior synonym of Cosmema furcata; Horn 1897d: 62 ("transvaalensis").

Junior synonym of *Dromica furcata*; Horn 1926a: 92 ("transvaalensis"), Wiesner 1992: 65 ("transvaalensis"), Werner 2000a: 153.

TYPE LOCALITY. "Transvaal".

Type specimens. Number and sex not given (depository unknown).

REMARKS. Synonymy with *furcata* was established by Horn (1897d: "Cosmema armigera D. ist das 3 von C. furcata Boh., C. transvaalensis [sic!] D. das 9").

TRICOSTATA W. Horn, 1897

Dromica tricostata Horn, 1897b: 237.

Dromica tricostata, II. Gruppe "tricostata"; Horn 1926a: 85.

Dromica tricostata; Wiesner 1992: 61, Werner 2000a: 99.

Type locality. "Benguela".

Type specimen. "1 ♀" (DEI!).

ILLUSTRATIONS. Habitus (Horn 1910b, pl. 10, fig. 10; Horn 1940, pl. 9, fig. 1; Werner 2000a, colour fig. 63).

DISTRIBUTION. <u>Angola</u>. *Cuanza Norte*: Carinda [9°40S-14°21E] (Horn 1940). *Benguela*: Benguela (Horn 1897b; Wellman & Horn 1908; Ferreira 1965; DEI). *Huila*: Caconda [13°44S-15°04E] (Werner 2000a).

Remarks. Two female specimens only were known so far (Cassola 1980a), but Werner (2000a) recently cited and figured a male specimen from Caconda, Huila province (KWC).

TRICOSTULATA W. Horn, 1932

Dromica (Myrmecoptera) tricostulata Horn, 1932a: 200.

Dromica tricostulata; Wiesner 1992: 64, Werner 2000a: 140.

Type locality. "in flumine exsiccato ('mulola') Chimporo in Angola meridionali".

Type specimen. "1 ♀" (DEI!).

ILLUSTRATIONS. Habitus (Werner 2000a, colour fig. 111).

DISTRIBUTION. Angola. Chimporo River (Horn 1932a; Werner 2000a; DEI). Lunda: Lunda (Horn 1935b).

REMARKS. Two female specimens only are apparently known so far (Cassola 1980a).

TRINOTATA Klug, 1834

Dromica trinotata Klug, 1834: 40.

Cosmema trinotata; Fleutiaux 1892: 37, Péringuey 1893: 84.

Dromica trinotata, I. Gruppe "trinotata"; Horn 1926a: 85.

Dromica trinotata; Wiesner 1992: 61, Werner 2000a: 99.

Type locality. Not indicated.

Type specimens. "Nur Mannchen" (ZMB?).

ILLUSTRATIONS. Habitus (Horn 1940, pl. 13, fig. 1; Werner 2000a, colour fig. 62).

DISTRIBUTION. South Africa. "Mus. Berlin" (BMNH). Western Cape: "Cap Bonne-Espérance" (Chaudoir 1864; NCI); "Cap B.E." (NCI); Cape Colony (Péringuey 1893); "Caffrerie" (MRAC). Remarks. This species seems to inhabit the Cape Province only, but no exact localities are known so far. Its taxonomic placement is unclear. Horn (1926a) isolated it in a group by its own. Three specimens only were seen in all at an early stage of this study, including a male specimen in BMNH, but none was duly examined.

TUBERCULATA Dejean, 1831

Dromica Tuberculata Dejean, 1831: 270.

Dromica tuberculata; Klug 1834: 39, Boheman 1848: 19, Chaudoir 1864: 39, Fleutiaux 1892: 34, Péringuey 1993: 78.

Dromica tuberculata, III. Gruppe "bicostata-octocostata"; Horn 1926a: 85.

Dromica tuberculata; Wiesner 1992: 61, Werner 2000a: 101.

Pseudodromica tuberculata (comb. n.).

Type locality. "Elle se trouve au cap de Bonne-Espérance".

Type specimen. "... le mâle, le seul sexe que je possède" (MNHN).

ILLUSTRATIONS. Habitus (Péringuey 1893, pl. 2, fig. 7, sub *D. immaculata*; Werner 2000a, colour figs 67, 67.1, 67a, 67a.1, 67a.2, 67b, 67c); left elytron (Horn 1940, pl. 21, fig. 1, 2); aedeagus (Cassola, this paper, fig. 120).

DISTRIBUTION. <u>South Africa</u>. *Eastern Cape*: "Cap de Bonne-Espérance" (Dejean 1831); Seymour (Péringuey 1893); Port Alfred (Werner 2000a; TMSA); Grahamstown (Péringuey 1888 & 1893, sub *D. immaculata*; MRAC, NCI, TMSA); Umtata (Werner 2000a; FCC); Dunbrody [33°28S-25°33E] (FCC, MRAC). *KwaZulu/Natal*: Natal (Dejean 1831; Chaudoir 1864, sub *D. acuminata* and *D. carinulata*; MRAC); Port Natal (Chaudoir 1860, sub *D. carinulata*; Chaudoir 1864); Durban (Péringuey 1893, sub "var. *carinulata*"); Eshowe (Péringuey 1893, sub "var. *carinulata*"); Park Rynie (Werner 2000a; TMSA). *Mpumalanga*: Lydenburg (Péringuey 1893, "var. *transvaalensis*"); Graskop (HFHC); Piet Retief (FCC). <u>Swaziland</u>. Malolotja NR (KWC, PSC); 25 km E Piggs Peak (FCC, KWC).

REMARKS. Re-described by Klug (1834), Boheman (1848), Chaudoir (1864) and Péringuey (1893). Until better information on the species' geographical variability will be available, I consider here three subspecies only: nominate *tuberculata* (Cape Province), *carinulata* (Natal and southern Mpumalanga), and *transvaalensis* (eastern Mpumalanga and Swaziland), while *acuminata* and *immaculata* are here considered to be just junior synonyms of ssp. *carinulata*. Péringuey (1893) erroneously referred *tuberculata* to Hope's authorship.

UMFULIANA Péringuey, 1896

Myrmecoptera umfuliana Péringuey, 1896: 116.

Junior synonym of Dromica Mauchi; Horn 1926a: 87.

Junior synonym of Dromica mauchii; Wiesner 1992: 62, Werner 2000a: 113.

Junior synonym of *Pseudodromica mauchii* (comb. n.)

Type Locality. "Zambesia (Umfuli River)".

Type specimens. Number not given, but both sexes included; 1 \(\text{(DEI!)}. \)

VARIOLATA Chaudoir, 1865

Dromica variolata Chaudoir, 1865: 51.

Cosmema variolata; Fleutiaux 1892: 36, Péringuey 1893: 87.

Dromica variolata, XVI. Gruppe "sexmaculata-Helleri"; Horn 1926a: 94.

Dromica variolata; Wiesner 1992: 68, Werner 2000a: 181.

Type locality. "... baie de Lagoa".

Type specimen. "Mâle" (MNHN).

ILLUSTRATIONS. Habitus (Werner 2000a, colour figs 182, 182.1); aedeagus (Cassola, this paper, fig. 39).

DISTRIBUTION. <u>South Africa</u>. *KwaZulu/Natal*: Natal (Werner 2000a; DEI); Empangeni [28°44S-31°54E] (NCI); Ntambanana [28°43S-31°45E] (FCC); Nyala GR (BVNC, NCI); Umfolozi GR (Werner 2000a; TMSA); Spioenkop NR [28°42S-29°30E] (FCC). <u>Mozambique</u>. *Maputo*: Delagoa Bay [=Maputo] (Chaudoir 1865; Péringuey 1893).

VITTATA Dejean, 1831

Dromica Vittata Dejean, 1831: 269.

Cosmema vittata; Fleutiaux 1892: 37, Péringuey 1893: 91.

Dromica coarctata vittata, XIII. Gruppe "coarctata"; Horn 1926a: 92.

Dromica coarctata var. vittata; Horn 1940: 274.

Dromica coarctata vittata; Wiesner 1992: 66, Werner 2000a: 157.

Dromica vittata (revised status).

Type locality. "...venant...du cap de Bonne-Espérance".

Type specimen. "...un individu femelle" (MNHN).

ILLUSTRATIONS. Habitus (Horn 1940, pl. 14, fig. 2; Werner 2000a, colour figs 138a, 138a.1, 138a.2); left elytron (Horn 1922, fig. 8); aedeagus (Cassola, this paper, fig. 31).

DISTRIBUTION. South Africa. Eastern Cape: "Cap de Bonne-Espérance" (Dejean 131); "Cap B.E." (NCI); "Cape Colony" (Péringuey 1893); Middelburg [31°3S-25°0E] (Werner 2000a; FCC, NCI). Remarks. I tentatively consider here *vittata* as a full distinct species, instead of a form of *coarctata*, because of the larger size and the different elytral pattern (see also Chaudoir 1864). However, just one exact locality is known so far, and it is not clear whether the two species may co-occur sympatrically and/or syntopically.

WELLMANI W. Horn, 1908

Cosmema Wellmani Horn, 1908a: 31.

Dromica Wellmani, XV. Gruppe "transitoria-auropunctata-elegantula"; Horn 1926a: 94.

Dromica wellmani; Wiesner 1992: 67, Werner 2000a: 177.

Foveodromica wellmani (comb. n.).

Type Locality. "Angola (Chiyaka district)".

Type specimens. Number not given, but both sexes included: $4 \circlearrowleft 3, 4 \circlearrowleft 9 \Leftrightarrow (DEI!); 1 \circlearrowleft (MRAC!).$

ILLUSTRATIONS. Habitus (Werner 2000a, colour fig. 171); aedeagus (Cassola, this paper, fig. 111). DISTRIBUTION. <u>Angola</u>. Chiyaka: Ekuiva River (Horn 1908a; Wellman & Horn 1908; DEI, MRAC). *Huila*: Bimbi [=Bimbe?] (Horn 1935b; Ferreira 1965). *Benguela*: Benguela (Ferreira 1965; Werner 2000a; MRAC).

Remarks. Ten specimens only in all are apparently known so far (Cassola 1980a).

WERNERI Cassola & Schüle, 2002

Dromica werneri Cassola & Schüle, 2002: 258.

Type locality. SW Zambia, 50 km NW Sesheke.

Type specimen. $1 \ \ (KWC!)$.

ILLUSTRATIONS. Habitus, labrum (Cassola & Schüle 2002, fig. 1a, b); habitat (Cassola & Schüle 2002, fig. 2).

DISTRIBUTION. Zambia. Western: 50 km NW Sesheke (Cassola & Schüle 2002; KWC).

REMARKS. A recently discovered species, known so far by the single female type specimen only (Cassola & Schüle 2002).

WESTERMANNI Schaum, 1861

Dromica westermanni Schaum, 1861: 75.

Jansenia Westermanni; Fleutiaux 1892: 35.

Cicindela Westermanni; Horn 1926a: 167.

Jansonia Westermanni; Rivalier 1961: 134.

Jansenia westermanni; Acciavatti & Pearson, 1989: 178.

Type locality. "Between Tranquebar and Madras".

Type specimens. Lectotype ♀ (ZMB); 2 ♂♂, paralectotypes (ZMUC) (Acciavatti & Pearson 1989).

ILLUSTRATIONS. Habitus (Horn 1915, pl. 17, fig. 7, colour illustration); left elytron (Horn 1938, pl. 50, fig. 8).

REMARKS. Despite its dromicoid appearance, this South Indian species has nothing to do with the African genus *Dromica*. It belongs to the Indian genus *Jansenia* Chaudoir, 1865, a member of subtribe Cicindelina (Rivalier 1971).

ZAMBIENSIS Cassola, this paper

Dromica zambiensis Cassola, this paper

Type locality. "N.W. Rhodesia, Mwengwa, 27°40E-13°S".

Type specimens. Holotype \Im (BMNH!); allotype \Im (BMNH!); 14 \Im \Im , 4 \Im \Im (BMNH!); 10 \Im \Im , 11 \Im \Im (FCC!); 3 \Im \Im , 3 \Im \Im (KWC!); 1 \Im , 1 \Im (NCI!); 3 \Im \Im , 4 \Im \Im (PSC!).

ILLUSTRATIONS. Habitus, labrum, aedeagus, left elytron (Cassola, this paper, figs 20-24).

DISTRIBUTION. Zambia. Copperbelt: Solwezi (BMNH); N'Changa (BMNH, FCC, TMSA). Central: Kafue City: Kafue River (FCC, GAC, KWC, PSC); Mazabuka [SW of Lusaka] (CMNH, JPC, JWC, KWC); Mwengwa [13°S-27°40E] (BMNH, FCC, TMSA); Kashitu: N of Broken Hill (BMNH, FCC, TMSA). Eastern: Kasanka NP at Waka Camp [12°30S-30°15E] (NCI).

ZULUANA Péringuey, 1908

Dromica (Cosmema) zuluana Péringuey, 1908: 272.

Dromica zuluana, XV. Gruppe "transitoria-auropunctata-elegantula"; Horn 1926a: 94.

Dromica zuluana; Wiesner 1992: 68, Werner 2000a: 178.

TYPE LOCALITY. "Natal (Eshowe)".

Type specimen. "♀" (SAM).

ILLUSTRATIONS. Habitus (Werner 2000a, colour fig. 175).

DISTRIBUTION. <u>South Africa</u>. Buffalo Pass (TMSA). *Eastern Cape*: Flagstaff (FCC); Umtata (TMSA). *KwaZulu/Natal*: "Natal" (DEI); Eshowe (Péringuey 1908; SAM); Dukuduku FR (BVNC); Cathedral Peaks FS [75 km WSW Estcourt] (Werner 2000a; FCC, HFHC); Royal NP [28°42S-28°55E] (TMSA); Bergville: Royal Natal NP (Wiesner 2001); Umfolozi GR (CIC). REMARKS. Horn (1935a) compared this species to *D. gilvipes*.

114 CASSOLA

APPENDIX II SPECIES GROUPS

Genus DROMICA Dejean, 1826

Third (penultimate) joint of labial palpi more or less inflated. Antennae filiform to foliate. Labrum four-haired, usually testaceous, typically tripartite, with the three middle teeth abruptly separated from the outer ones by a deep indentation on both sides of front edge. Pronotum variable in shape, middle lobe either rounded and globose or parallel-sided, usually transversely striated; epipleural rims either effaced or raised. Mesepisterna much larger than metepisterna. Elytral markings usually present in most species, sometimes reduced to single bands, patches or spots only, sometimes even fully lacking; elytral sculpture sometimes including longitudinal costae. Underside pubescence more or less developed. Male aedeagus differently shaped, depending on the species-groups.

I. GROUP "COARCTATA/FURCATA/MARGINELLA" (Dromica)

Third (penultimate) joint of labial palpi inflated. Antennae filiform. Pronotum subsquare. Aedeagus tapering, arc-shaped, sometimes a bit drawn apically, more or less dorsally hooked at apex.

a) Elytral markings a complete or interrupted submarginal band, with a short to moderately long discal spur after the middle.

coarctata Dejean, 1826 (Dromica) vittata Dejean, 1831 pseudofurcata W. Horn, 1922 furcata (Boheman, 1848) (Cosmema) miranda (Péringuey, 1896) ramigera (Péringuey, 1893) pseudocoarctata W. Horn, 1924

b) Elytral markings a submarginal band with no projections on disc.

marginella (Boheman, 1848)
alboclavata Dokhtouroff, 1883
albicinctella Bates, 1878
stalsi Cassola, this paper
endroedyi Werner & Schüle, 1999
connexa (Péringuey, 1893)
lateralis (Boheman, 1860)
aspera Chaudoir, in Dokhtouroff, 1883 [nomen nudum]
foveolata Péringuey, 1888
granulata Dokhtouroff, 1883

II. GROUP "SEXMACULATA"

Third (penultimate) joint of labial palpi inflated. Antennae filiform. Pronotum subrectangular, transversely striated. Elytral markings usually three submarginal roundish to elongate spots (humeral, median and subapical), sometimes just the suapical one is left. Elytral sculpture made up with roundish to polygonal punctures or appressed pits.

a) Male aedeagus tapering, arc-shaped, more or less stretched in a straight apical beak.

```
sexmaculata Chaudoir, 1860
citreoguttata Chaudoir, 1864
mirabilis Cassola, Schüle & Werner, 2000
ambitiosa (Péringuey, 1893)
thomaswiesneri Wiesner, 2001
variolata Chaudoir, 1865
```

b) Male adeagus stout, almost straight, with basal collus wide.

```
helleri (W. Horn, 1897)
kolbei (W. Horn, 1897)
```

III. GROUP "LEPIDA"

Small species. Third (penultimate) joint of labial palpi inflated. Antennae filiform. Pronotum subrectangular, more or less elongated, with fine waved transversal striae. Elytral markings a submarginal band from below the shoulder to apex, sometimes tending to be fragmented in two separate spots (submarginal and subapical); males usually with a small protruding humeral dot too. Elytral sculpture made up with roundish, open, appressed punctures. Aedeagus fusiform, tapering, with a blunt, sometimes slightly hooked, apex.

```
lepida (Boheman, 1848)
apicalis W. Horn, 1903
lepidula W. Horn, 1903
tenellula W. Horn, 1903
tenella (Péringuey, 1893)
pseudotenella Cassola, this paper
leydenburgiana (Péringuey, 1898)
```

IV. GROUP "ELEGANTULA"

Small to medium-sized species. Third (penultimate) joint of labial palpi more or less inflated. Elytral markings consisting of two submarginal spots (median and subapical, sometimes narrowly coalescent in between), with sometimes an additional humeral dot in the males; markings may be

small or even lacking, and in one instance (*D. angusticollis*) there is a middle band obliquely on disc. Elytral sculpture variable, from the prothymoid type to sparse, widely apart, roundish punctures. Aedeagus fusiform, elongate, straight, tending to be twisted dorsally, with a blunt rounded apex.

a) Small to very small species. Antennae filiform. Pronotum subsquare to subrectangular, more or less raised on disc, with waved transverse striae.

```
elegantula (Boheman, 1848)
convexicollis Péringuey, 1908
cordicollis Chaudoir, 1865
gilvipes (Boheman, 1848)
semilevis W. Horn, 1897
grutii Chaudoir, 1865
zuluana Péringuey, 1908
cristagalli (W. Horn, 1935)
```

b) Small to medium-sized species. Antennae mostly filiform, sometimes slightly dilated. Pronotum elongate, more or less cylindrical in the middle, finely striated transversely.

```
transitoria (Péringuey, 1896)
concinna Péringuey, 1904
schuelei Cassola, hoc loco
traducens W. Horn, 1903
angusticollis (Péringuey, 1894)
```

V. GROUP "CONSIMILIS"

Third or penultimate joint of labial palpi inflated. Antennae not or poorly foliated. Pronotum subrectangular, elongate, transversely striated. Elytral markings a submarginal band from shoulder to apex, sometimes interrupted in the middle, emitting on disc a short spur, or more or less connected with a discal spot after the middle; basal element lacking. Elytral sculpture made up with roundish to polygonal punctures or appressed pits. Aedeagus fusiform, tapering, arc-shaped, dorsally curved or slightly hooked at apex.

```
consimilis Bertoloni, 1858
saundersii Chaudoir, 1865
specialis Pèringuey, 1904
filicornis (W. Horn, 1898)
limbata Bertoloni, 1858
gloriosa (Péringuey, 1896)
laticollis W. Horn, 1903
bilunata C. H. Dohrn, 1883
flavovittata W. Horn, 1896
spectabilis (Péringuey, 1893)
```

pilosifrons W. Horn, 1924 ?discoidalis (W. Horn, 1897)

VI. GROUP "ERIKSSONI"

Third or penultimate joint of labial palpi inflated. Antennae foliated. Pronotum subrectangular, elongate, with transversal to irregular waved striae. Elytral markings a submarginal band from shoulder to apex, sometimes only from middle to apex, emitting a discal spur in the middle or connected with a transversal middle band. Elytral sculpture made up with roundish to polygonal punctures or appressed pits, often arranged in longitudinal irregular rows; one to three longitudinal costae present in some species only, usually better apparent in females. Aedeagus tapering, arcshaped, more or less dorsally curved or hooked at apex.

erikssoni (Péringuey, 1892) pentheri (W. Horn, 1899) angolana CASSOLA, 1980 kavanaughi Cassola, 1980 lunai Basilewsky, 1965 tricostulata W. Horn, 1932 werneri Cassola & Schüle, 2002 similis Cassola, 1980 passosi Basilewsky, 1974 differens Cassola, 1986 kanzenzensis Cassola, 1986 nigroplagiata (W. Horn, 1926) seriepunctata W. Horn, 1929 confusa Cassola, 1986 mesothoracica W. Horn, 1909 prolongatesignata W. Horn, 1925 zambiensis Cassola, this paper proepipleuralis (W. Horn, 1926)

VII. GROUP "NOBILITATA"

Third or penultimate joint of labial palpi poorly to moderately inflated. Pronotum subrectangular, rounded above, transversely striated. Elytral markings with no basal patch.

a) Antennae more or less foliated. Elytra strongly sculptured, with irregular longitudinal costae and transversal reticula between. Aedeagus tapering, arc-shaped, with a narrow, long, button-ended or slightly hooked, apical beak.

erlangeri W. Horn, 1904

118 CASSOLA

hildebrandti W. Horn, 1903 kenyana Werner, 1993 abukari Cassola, 1989 somalica Cassola, 1989 nobilitata (Gerstäcker, 1867)

b) Antennae filiform to slightly dilated. Elytral sculture made up with deep polygonal appressed alveola. Apical beak of aedeagus very long, obliquely bent downwards apically.

bennigseni (W. Horn, 1896) crassereducta W. Horn, 1909 peringueyi W. Horn, 1896

VIII. GROUP "BERTOLONII"

Third or penultimate joint of labial palpi inflated. Antennae foliated. Pronotum subrectangular, transversely and finely striated. Elytral markings lacking or reduced to a subapical spot only. Elytral longitudinal costae present in some species only. Male aedeagus large, long, straight, dorsally hooked at apex.

bertolonii (Thomson, 1856)
costata (Péringuey, 1893)
fossulata Wallengren, 1881
quadricostata W. Horn, 1903
fundoplanata W. Horn, 1909?
limpopoiana (Péringuey, 1893)
brzoskai Cassola, this paper
oneili W. Horn, 1924
prolongata W. Horn, 1903
junodi (Péringuey, 1892)

IX. GROUP "EGREGIA-SCHAUMI-BATESI" (Myrmecoptera)

Third or penultimate joint of labial palpi more or less inflated. Antennae more or less foliated. Pronotum cylindrical, globose, evidently constricted in front and behind. Elytral markings of the *erikssoni*-type. Aedeagus tapering, arc-shaped, usually with a blunt or button-ended apex, slightly bent on the ventral side.

egregia (GERMAR, 1843) (Myrmecoptera) neumanni (KOLBE, 1897) tarsalis (W. HORN, 1898) cupricollis W. HORN, 1913 elongatoplanata (W. Horn, 1922) schaumi (W. Horn, 1892) globicollis W. Horn, 1914 taruensis (Kolbe, 1897) setosipennis W. Horn, 1913 ertli W. Horn, 1903 antoniae Werner, 1998 moraveci Werner, 1998 sigrunae Werner, 1998 paulae Cassola, this paper batesi (W. Horn, 1900) borana Cassola, 1978 oesterlei Werner, 1993 lizleri Werner, 1996

X. Species "Incertae Sedis"

The following sixteen species offer a puzzling combination of characters, and can hardly find accomodation either in one of the above mentioned species groups or in the two genera described below. Their taxonomic placement requires further study. Most of these species have poorly or not inflated labial palpi (except serietuberculata), and filiform antennae (except stutzeri). Female type specimens of two species (tricostata, bicostulata), which Horn (1926a) had considered to form a special group II ("tricostata"), were examined at an early stage of this study, but they should be properly re-checked, as for the former (tricostata) a male specimen seems to be presently available. Four species (foveicollis, serietuberculata, stutzeri, trinotata) have been considered by Horn (1926a), perhaps correctly, to constitute different species-groups by their own. Two more species (gibbicollis, abruptesculpta) were isolated by Horn (1926a) in a distinct Group XV ("gibbicollis"), but it has to be emphasized that gibbicollis has a very peculiar pronotal and body shape, which would seem more reminiscent of Myrmecoptera, and as a consequence both abruptesculpta and allardi (Basilewsky 1963: "se rapproche le plus de D. abruptesculpta") could hardly be included in the same group as gibbicollis. One species (confluentesculpta) was ranged by Horn (1926a) in the "furcata-marginella" group, probably because of the elytral narrow submarginal band; nevertheless, its unusual elytral sculpture would lead to exclude such relationship. One further species (dolosa, with its close allied murphyi), shows a combination of characters which is someway reminiscent of the "elegantulatraducens" group, but the shape of the aedeagus definitely appears to be rather distinctive. Finally, as to allardiana, it would seem to be more related to species such as Bennigsenium hexastictum and B. cosmemoides (W. Horn, 1913), thus probably to be placed alltogether in a distinct new genus by their own, which should be regarded as someway intermediate between Dromica and Bennigsenium, in subtribe Dromicina.

abruptesculpta W.Horn, 1914 allardi Basilewsky, 1963 allardiana Basilewsky, 1972 bicostulata W. Horn, 1914
confluentesculpta W. Horn, 1913
foveicollis W. Horn, 1913
gibbicollis W. Horn, 1913
hexasticta Fairmaire, 1887
serietuberculata W. Horn, 1929
tricostata W. Horn, 1897
trinotata Klug, 1834
dolosa (Péringuey, 1894)
murphyi Schüle & Werner, 2001
stutzeri W. Horn, 1913
rawlinsi Schüle & Werner, 2001
termitophila Schüle & Werner, 2001

Genus FOVEODROMICA nov.

Third or penultimate joint of labial palpi slender, not inflated. Antennae filiform. Pronotum subsquare to subrectangular, transversely striated, the striae being finer or coarser, straighter or waved. Elytrae with a typical longitudinal row of larger foveae, parallel to, but some distance from, the suture, alternating with raised, impunctate areoles in between. Aedeagus tapering, arc-shaped, usually more or less inflated dorsally after the middle, with a rounded blunt apex.

a) Elytral markings a roundish to transverse submarginal spot in the middle and often also a subapical lunule, with no humeral dots in both sexes.

gracilis (W. Horn, 1909)

punctatissima (W. Horn, 1929)

spinipennis (W. Horn, 1929)

intermediopunctata (W. Horn, 1929)

laterodeclivis (W. Horn, 1929)

horii (Cassola, 1986)

profugorum (Cassola & Miskell 2002)

strandi (W. Horn, 1914)

juengeri (Cassola, 1985)

wellmani (W. Horn, 1908)

marginepunctata (W. Horn, 1908)

densepunctata (W. Horn, 1909)

b) Elytral markings a narrow submarginal band from shoulder to apex (sometimes interrupted). *humeralis* (W. HORN, 1913)

```
grossula (W. Horn, 1914)
soror (W. Horn, 1935)
auropunctata (Quedenfeldt, 1883)
```

Genus PSEUDODROMICA nov.

Third or penultimate joint of labial palpi not or poorly inflated. Antennae from filiform to more or less enlarged, sometimes foliated. Elytral longitudinal costae or vittae present in some species. Elytral markings variable, sometimes fully lacking, or with a subapical lunule only, or with two to three submarginal spots; sometimes a discal spot, a basal patch, an apical trans-sutural spot, or a continuous narrow submarginal band, may also be present. Aedeagus bulky, tapering, with a short straight apical beak.

a) Pronotum glabrous, subsquared, with discal tubercles.

```
clathrata (KLUG, 1834)
sculpturata (Boheman, 1848)
planifrons (W. HORN, 1896)
pseudoclathrata (Péringuey, 1893)
grandis (Péringuey, 1893)
formosa (Péringuey, 1894)
gunningi (Péringuey, 1898)
oberprieleri (CASSOLA, 1986)
lerouxae CASSOLA, this paper
invicta (Péringuey, 1894)
neavei (W. Horn, 1913)
setosula (W. Horn, 1909)
quinquecostata (W. Horn, 1892)
octocostata (Chaudoir, 1864)
tuberculata (DEJEAN, 1831)
?albivittis (Chaudoir, 1865)
```

?bicostata (W. Horn, 1914)

b) Pronotum glabrous, transversely striated, not tuberculated.

```
polyhirmoides (BATES, 1872)
marshallana (W. HORN, 1901)
```

c) Pronotum longitudinally pubescent in the middle.

```
mauchii (Bates, 1872)
marshalli (Péringuey, 1894)
```

ACKNOWLEDGEMENTS

This paper could never have been prepared without the most kind help and co-operation of the late Sebastian Endrödy-Younga (former Curator of Coleoptera, Transvaal Museum, Pretoria, South Africa), who made it possible to me to make a full revision of the rich material of his institution. Geoffrey Kibby, Martin D. Brendell and Stuart Hine (Natural History Museum, London, Great Britain), the late Pierre Basilewsky (Musée Royal de l'Afrique Centrale, Tervuren, Belgium), Lothar Zerche and the late L. Dieckmann (Deutsche Entomologische Institut, Eberswalde, Germany), V.B. Whitehead and M.A. Cochrane (South African Museum, Cape Town, South Africa), were also all instrumental in making it possible for me the study of the important collections of their institutions, and in particular of many type specimens from the Horn (DEI) and Péringuey (SAM) collections.

Moreover, thanks are to be given to the Curators of the following other museums and institutions who submitted additional important specimens for study and identification: Agriculture Canada (Ottawa, Ontario, Canada; A. Smetana), California Academy of Sciences (San Francisco, California, USA; David Kavanaugh), Carnegie Museum of Natural History (Pittsburgh, Pennsylvania, USA; Robert L. Davidson), Field Museum of Natural History (Chicago, Illinois, USA; Cynthia Salvino), Instituto de Investigação Agronomica (Nova Lisboa, Angola; J. Passos de Carvalho), Institut Royal des Sciences Naturelles de Belgique (Bruxelles, Belgium; Alain Drumont), Museo Civico di Storia Naturale (Carmagnola, Italy; Gianfranco Curletti), Museo Civico di Storia Naturale (Trieste, Italy; Renato Mezzena), Museo Civico di Storia Naturale (Venice, Italy; Enrico Ratti), Museo Civico di Storia Naturale "G. Doria" (Genova, Italy; Roberto Poggi), Museo Civico di Zoologia (Rome, Italy; Vincenzo Vomero), Museo Regionale di Scienze Naturali (Torino, Italy; Mauro Daccordi), Museo Zoologico "La Specola" (Florence, Italy; Benedetto Lanza), Muséum d'Histoire Naturelle (Geneva, Switzerland; Ivan Löbl), Museum für Naturkunde (Berlin, Germany; Fritz Hieke), Museum für Zoologie (Lund University, Sweden; Roy Danielsson), Muséum National d'Histoire Naturelle (Paris, France; Hélène Perrin, Thierry Deuve), National Collection of Insects (Pretoria, South Africa; Rolf Oberprieler, Riaan Stals), National Museum (Bloemfontein, South Africa; Schalk Louw), National Museum (Nairobi, Kenya; John E. Miskell, Richard K. Bagine), State Museum (Windhoek, Namibia; J. Irish).

Several colleagues and friends also provided specimens or submitted specimens from their collections, for which I am much grateful, namely: Gianni Alberghini (Bologna, Italy), the late Vincent Allard (Waterloo, Belgium), Erik Arndt (Bernburg, Germany), Arnaldo Bordoni (Florence, Italy), Sandro Bruschi (Rome, Italy), C.M.C. Brouerius van Nidek (Voorburg, Nederland), David W. Brzoska (Lawrence, Kansas, USA), Giuseppe Carpaneto (Rome, Italy), my late father Mario Cassola (Rome, Italy), Erik Holm (The University of Pretoria, South Africa), Michio Hori (Wakayama, Japan), Henry F. Howden (Ottawa, Canada), Cesare Iacovone (Atessa, Italy), Vít Kabourek (Zlín, Czech Republic), John E. Miskell (Geneseo, New York, USA), Riccardo Nardi (Siena, Italy), Roger Naviaux (Domérat, France), Colin R. Owen (Somerset West, South Africa), David L. Pearson (Tempe, Arizona, USA), Johann Probst (Wien, Austria), Hirofumi Sawada (Aomori, Japan), Peter Schüle (Herrenberg, Germany), William D. Sumlin (San Antonio, Texas, USA), Vladimír Tichy (Trebon, Czech Republic), Alfried Vogler (Natural History Museum, London, Great Britain), Karl Werner (Peiting, Germany), Jürgen Wiesner (Wolfsburg, Germany), Gario Zappi (Casalecchio di Reno, Italy).

Sibylle Gussmann (Transvaal Museum, South Africa), Peter Schüle and Karl Werner kindly

helped to better locate some localities found in old labels. Andreas Oesterle (Leutenbach, Germany), Hans Pohl (Rostock, Germany) and Peter Schüle kindly provided the colour pictures of live specimens that illustrate this paper. Augusto Vigna Taglianti (Rome, Italy) provided the colour slides of figs 164-166. Karl Werner and Jürgen Wiesner also helped in many ways. David L. Pearson (Tempe, Arizona, USA) and Claudio Vita-Finzi (London, U.K.) kindly revised the English text and gave useful suggestions.

REFERENCES

- ACCIAVATTI R. E. & PEARSON D.L., 1989 The tiger beetle genus *Cicindela* (Coleoptera, Insecta) from the Indian subcontinent. Annals of the Carnegie Museum, 58: 77-353.
- Arnot E., 1998 Larval description and natural history data of two genera of tiger beetles from Southern Africa (Coleoptera, Cicindelidae). Entomologische Blätter, 94: 33-45.
- ARNDT E. & CASSOLA F., 1999 Description of Prothymine tiger beetle larvae from South East Asia (Coleoptera Cicindelidae). Bollettino della Società entomologica italiana, 132: 105-115.
- Babault G., 1921 Voyage dans l'Afrique Orientale Anglaise, 1912-1913. Résultats scientifiques. Insectes Coléoptères Cicindelidae. Paris, 1-14, 1 pl.
- Basilewsky P., 1948a Contributions à l'étude des Coléoptères Carabidae du Congo Belge. I. Etude des Carabiques recueillis par M.A. Collart. Bulletin du Musée royal d'Histoire naturelle de Belgique, 24: 1-9.
- Basilewsky P., 1948b Descriptions de Coléoptères Carabidae nouveaux d'Afrique et notes diverses sur des espèces déjà connues. IV. Bulletin de la Société entomologique de France, 53: 151-153.
- Basilewsky P., 1951 Les Insectes du Congo Belge. Encyclopédie du Congo Belge, 2: 181-258, pls. 1-12.
- Basilewsky P., 1953 Sur les types des Carabidae sud-africains décrits par H. D. J. Wallengren. Opuscula entomologica, 18: 190-192.
- Basilewsky P., 1957 Sur les types des Carabidae africains décrits par C.A. et H. Dohrn (1876-1891). Annales zoologici, 16, 24: 465-473.
- Basilewsky P., 1960 Carabidae (Coleoptera) de l'Angola (Deuxième Partie). Sur les types des espèces décrites de l'Angola par Putzeys. Companhia de Diamantes de Angola (Diamang), Serviços culturais, Subsídios para o Estudo da Biologia na Lunda. Estudos diversos, 19, 51: 41-50.
- Basilewsky P., 1962a Mission zoologique de l'I.R.S.A.C. en Afrique orientale (P. Basilewsky et N. Leleup, 1957). LX. Coleoptera Carabidae. Annales du Musée royal de l'Afrique centrale, Tervuren, Belgique. Série in-8°, Sciences zoologiques, 107: 48-337.
- Basilewsky P., 1962b Carabidae I (Coleoptera Adephaga). In: Exploration du Parc National de la Garamba Mission H. de Saeger, Fasc. 29, Bruxelles, 1-152.
- Basilewsky P., 1963 Coléoptères Carabidae africains nouveaux. XIV. Revue de Zoologie et Botanique africaines, 68: 99-116.
- Basilewsky P., 1965 Coléoptères Carabidae africains nouveaux. XV. Revue de Zoologie et Botanique africaines, 72: 138-151.
- Basilewsky P., 1972 Descriptions de deux Coléoptères Carabidae nouveaux de l'Afrique centrale. Revue de Zoologie et Botanique africaines, 85: 275-277.

Basilewsky P., 1974 - Description d'une *Dromica* nouvelle du sud de l'Angola (Coleoptera Carabidae Cicindelinae). Revue de Zoologie africaine, 88: 674-676.

- BATES H. W., 1872 Notes on Cicindelidae and Carabidae, and descriptions of new species (No. 15). Entomological monthly Magazine, 8: 285-287.
- BATES H. W., 1878 Description of twenty-five new species of Cicindelidae. Cistula entomologica, 2: 329-336.
- BATES H. W., 1886 Tropical African Coleoptera, chiefly from the Zanzibar mainland. Entomological monthly Magazine, 22: 188-190.
- Bertoloni G., 1858 Illustrazione dei prodotti naturali del Mozambico. Dissertazione VI. Intorno ad Insetti Coleotteri. Memorie della Accademia delle Scienze dell'Istituto di Bologna, (1) 8 (1857): 297-321, t. 23.
- BOHEMAN C.H., 1848 Insecta Caffrariae annis 1838-1845 a J. A. Wahlberg collecta. Pars I. Fascic. I. Coleoptera. Holmiae, 1-26.
- BOHEMAN C.H., 1860: Coleoptera samlade af J. A. Wahlberg i Syd-Vestra Afrika. Ofvers. af K.Vet.-Akad. Förh., 1: 3-22.
- Bologna M.A., Aloisi G. & Vigna Taglianti A., 1990 Phoretic association of some African *Cyaneolytta* Péringuey 1909 with carabids, and morphology of first instar larvae in Meloini (Coleoptera Meloidae). Tropical Zoology, 3: 159-180.
- Brême F., 1844 Insectes Coléoptères nouveaux ou peu connus. Première et deuxième Décades. Annales de la Société entomologique de France, (2) 2: 287-313, pl. 7.
- Brenon P., 1972 The geology of Madagascar. Pp. 27-86, in: R. Battistini & G. Richard-Vindard (eds.), Biogeography and Ecology of Madagascar. Dr W. Junk B.V. Publishers, The Hague, XV+765 pp.
- Brouerius van Nidek C.M.C., 1980 Description of some new Cicindelinae (Col.). Entomologische Blätter, 75: 129-137.
- Burgeon L., 1937 Les Cicindelinae du Congo Belge, pp. 5-54, pl. I. In: Catalogues raisonnés de la faune Entomologique du Congo Belge. Annales du Musée du Congo Belge, Tervueren, Belgique, in-4°, Zoologie, Série III, Section II, Tome VI, Fascicule 1.
- CARPENTER G.D.H., 1936 *Eccoptoptera cupricollis* Chd. and another Coleopterous mutilloid. Proceedings of the royal entomological Society of London, (A) 2 (3-5): 49-50.
- Cassola F., 1975 Studies on Cicindelids. 12. Cicindelidae collected by Avv. Mario Cassola in some south eastern regions of Africa (Coleoptera Cicindelidae). Monitore Zoologico Italiano, (N. S.) Suppl. 6, 9: 189-221.
- Cassola F., 1978a Studi sui Cicindelidi. XV. Rassegna dei Cicindelidae dell'Etiopia, con descrizione di cinque nuove entità sistematiche (Coleoptera). In: Zoological researches in Ethiopia. Part I Some results of the first and the second Italian zoological mission to Ethiopia, sponsored by the National Academy of Lincei (1973 and 1975). Accademia nazionale dei Lincei, Quaderno n. 243: 75-124, pls. I-II.
- Cassola F., 1978b Studi sui Cicindelidi. XX. Cicindelidae raccolti dal Marchese Saverio Patrizi nell'Africa Centrale (Coleoptera Cicindelidae). Annali del Museo civico di Storia naturale di Genova, 82: 104-114.
- Cassola F., 1980a Studies on Cicindelids. XXIII. Three new *Dromica* from the Angola (Coleoptera Cicindelidae). Revue de Zoologie africaine, 94: 201-216.
- CASSOLA F., 1980b Études sur les Cicindélides. XXV. Notes systématiques et synonymiques sur

- quelques espèces africaines (Coleoptera, Cicindelidae). Revue de Zoologie africaine, 94: 693-708.
- Cassola F., 1983a Studies on Cicindelids. XXX. Description of *Dromica pseudosetosula* n. sp. (Coleoptera: Cicindelidae). Nouvelle Revue d'Entomologie, 13: 347-350.
- Cassola F., 1983b Studi sui Cicindelidi. XXXVIII. Revisione del genere *Trichotaenia* Rivalier, con descrizione di due nuove specie (Coleoptera, Cicindelidae). Revue de Zoologie Africaine, 97: 689-704.
- Cassola F., 1985 Studi sui Cicindelidi. XLIII. Una nuova *Dromica* dell'Angola (Coleoptera Cicindelidae). Redia, 68: 33-37.
- Cassola F., 1986a Studies on Cicindelids. XLI. A new *Dromica* from the Transvaal (Coleoptera, Cicindelidae). Journal of the entomological Society of South Africa, 49: 137-140.
- Cassola F., 1986b Studi sui Cicindelidi. XLIV. Note su alcune *Dromica* centro-africane (Coleoptera, Cicindelidae). Revue de Zoologie africaine, 100: 337-355.
- Cassola F., 1989 Studies on Cicindelids. LIX. Two new *Dromica* species from Somalia (Coleoptera Cicindelidae). Redia, 72: 117-125.
- Cassola F., 1995 Studies on Tiger Beetles. LXXVI. On some new or poorly known African species (Coleoptera, Cicindelidae). Fragmenta entomologica, 26: 259-291.
- Cassola F. & Miskell J.E., 1990 Somalian tiger beetles: faunistics and biogeography (Coleoptera, Cicindelidae). Biogeographia, 14 (1988): 175-227.
- Cassola F. & Miskell J.E., 2001 Two new tiger beetle species from north-western Tanzania (Coleoptera, Cicindelidae). Fragmenta entomologica, 33: 21-41.
- Cassola F. & Pearson D.L., 2000 Global patterns of tiger beetle species richness (Coleoptera: Cicindelidae): their use in conservation planning. Biological Conservation, 95: 197-208.
- CASSOLA F. & POHL H., 2002 The female of *Socotrana labroturrita* Cassola & Wranik, 1998 (Coleoptera: Cicindelidae). Fauna of Saudi Arabia, 2002, 20 (Special issue on the terrestrial and freshwater fauna of Socotra (in press).
- Cassola F. & Schüle P., 2002 A new *Dromica* species from south-western Zambia (Coleoptera: Cicindelidae). Entomologische Zeitschrift, Stuttgart, 9: 258-259.
- Cassola F., Schüle P. & Werner K., 2000 A new South African *Dromica* species of the *sexmaculata*-group (Coleoptera: Cicindelidae). Lambillionea, 100: 271-278.
- Cassola F. & Vigna Taglianti A., 1990 Mimicry in Cicindelini e Graphipterini africani (Coleoptera, Cicindelidae). Biogeographia, 14 (1988): 229-233.
- Cassola F. & Wranik W., 1998 A remarkable new tiger beetle from Socotra Island, Republic of Yemen (Coleoptera: Cicindelidae). Mitteilungen aus dem Museum für Naturkunde Berlin, Deutsche entomologische Zeitschrift, Berlin, 45: 265-268.
- Castelnau de Laporte F. L., Comte de, 1840 Histoire naturelle des Insectes Coléoptères, avec une introduction renfermant l'anatomie et la physiologie des animaux articulés par M. Brullé. Tome prémier. Paris, P. Duménil éditeur, CXXV-324 pp.
- Chaudoir M., Baron de, 1860 Matériaux pour servir à l'étude des Cicindélètes et des Carabiques. Bulletin de la Société impériale des Naturalistes de Moscou, 33: 269-337.
- Chaudoir M., Baron de, 1864 Note sur les genres *Dromica*, *Tricondyla* et *Collyris*. Revue et Magasin de Zoologie, 7-11, 37-43, 72-77, 104-108.
- Chaudoir. Bruxelles, Imprimerie et Lithographie de J. Nys, in-8°, 1-64.

- Chaudoir M., Baron de, 1878 Énumération des Cicindélètes et des Carabiques, recueillis par M. A. Raffray, dans les iles de Zanzibar et de Pemba, ainsi qu'à Bagamoyo, Mombaze et sur les montagnes de Schimba, avec la description des espèces nouvelles. Revue et Magasin de Zoologie, 69-71.
- COCHRANE M. A., 1995 Coleoptera type material in the South African Museum. Part 1. Carabidae. Annals of the South African Museum, 104: 249-309.
- COLLAR N.J. & STUART S.N., 1985 Threatened Birds of Africa and Related Islands. The ICBP/IUCN Red Data Book, Part 1. Third Edition, Cambridge, U.K., XXXIV-761 pp.
- DEJEAN P.F.M.A., 1826 Species général des Coléoptères. Tome second. Supplément aux deux premiers volumes. Paris, chez Crevot, 413-501.
- Dejean P.F.M.A., 1831 Species général des Coléoptères. Tome Cinquième. Supplément aux cinq premiers volumes. Paris, chez Méquignon-Marvis, 195-276.
- Demoor J., 1886 Liste des Cicindélides décrits postérieurment au Catalogue de Munich. Annales de la Société entomologique de Belgique, 30: 46-53.
- Deuve Th., 1993 L'abdomen et les genitalia des femelles de Coléoptères Adephaga. Mémoires du Muséum national d'Histoire naturelle, Tome 155, Zoologie, 184 pp.
- DÖBLER H., 1973 Katalog der in den Sammlungen des ehemaligen Deutschen Entomologischen Institutes aufbewahrten Typen IX. Coleoptera, Cicindelidae. Beiträge zur Entomologie, 23: 355-419.
- DOHRN C.A., 1881 Exotisches. Holubiana. Stettiner entomolologische Zeitung, 41: 309-327.
- DOHRN C.A., 1883 Exotisches. Stettiner entomologische Zeitung, 44: 278-284.
- DOHRN C.A., 1887 Ueber einige Bertoloni'schen Käfer aus Mossambik im Museum von Bologna. Stettiner entomologische Zeitung, 48: 171-174.
- DOHRN C. A., 1891 Coleoptera Transvaalensia. Stettiner entomologische Zeitung, 52: 382-386.
- Dokhtouroff W., 1883 Matériaux pour servir à l'étude des Cicindélides. II. Revue mensuelle d'Entomologie, 1: 4-14.
- Fairmaire L., 1882 Coléoptères recueillis par M. G. Révoil chez les Çomalis. In: G. Révoil, Mission G. Révoil aux pays Çomalis. Faune et Flore. Paris [Not examined].
- FAIRMAIRE L., 1887 Coléoptères des voyages de M. G. Revoil chez les Somâlis et dans l'intérieur du Zanguebar. Annales de la Société entomologique de France, (6) 7: 69-186.
- Fanshawe J.H., 1994 Arabuko-Sokoke Forest, Kenya's coastal jewel. Msafiri (Kenya Airways), 7: 22-26.
- Ferreira M.C., 1965 Catalogo dos Coleopteros de Angola. Revista de Entomologia de Moçambique, 8: 462-470.
- FLEUTIAUX E., 1884 Voyage de M. E. Simon dans l'Afrique australe (janvier-avril 1893). Cicindelidae. Bulletin de la Société entomologique de France, 63: 401-404.
- FLEUTIAUX E., 1892 Catalogue systématique des Cicindelidae décrits depuis Linné. Liège, H. Vaillant-Carmanne, 186 pp.
- FAHR J., 1998 Die Sandlaufkäfer (Coleoptera: Cicindelidae) des Comoe-Nationalparks, Elfenbeinkuste: Faunistik, Zoogeographie und Okologie. Bonner zoologische Beiträge, 47 (3-4): 321-343.
- FRITSCH G., 1867 Das Insektenleben Süd-Afrika's. Eine biologische Scizze. Berliner entomologische Zeitschrift, 11: 247-277.
- GERMAR E.F., 1843 Description de deux Cicindélètes nouvelles. Magasin de Zoologie, Pl. 124, 1-

4.

- GERSTÄCKER A., 1867 Beitrag zur Insekten-Fauna von Zanzibar, nach dem während der Expedition des Baron v. d. Decken gesammelten Material zusammengestellt. Archiv für Naturgeschichte, 33: 7-10.
- GERSTÄCKER A., 1873: Ordo III. Coleoptera Lin., Fam. Carabidae Leach. In: Baron von den Decken, Reisen Ostafr. Ins., 55-312, pls. IV-XIII.
- GIACHINO P.M., 1982 Cataloghi. III. Collezione Coleotterologica di Massimiliano Spinola. Museo regionale di Scienze naturali, Torino, 616 pp.
- Gomes Alves M.L., 1954 Contribuição para o estudo dos Carabídeos de Moçambique. Estudos de Zoologia, Anais, 9: 9-41.
- HEYNE A., 1894 Systematisches und alphabetisches Verzeichnis der bis 1892 beschreibenen exotischen Cicindelidae. Leipzig, Ernst Heyne, 38 pp.
- HORN W.. 1892a Fünf Dekaden neuer Cicindeleten. Deutsche entomologische Zeitschrift, 65-92.
- HORN W., 1892b Drei neue afrikanische Cicindeliden. Deutsche entomologische Zeitschrift, 220-221.
- HORN W., 1893 Bemerkungen und Nachträge zum "Catalogue systématique des Cicindelidae" par Fleutiaux (1893). Deutsche entomologische Zeitschrift, 321-347.
- HORN W., 1894 Der "Descriptive Catalogue of the Coleoptera of South Africa by L. Péringuey". Deutsche entomologische Zeitschrift, 305-317.
- HORN W., 1896a Käfer aus Ostafrika, gesammelt von R. v. Bennigsen (1893-1895). Deutsche entomologische Zeitschrift, 55-63.
- HORN W., 1896b Beitrag zur Synonymie der Cicindeliden. Deutsche Entomologische Zeitschrift, 353-357.
- HORN W., 1896c Zehn neue Cicindeliden-Species nebst einigen neuen Varietäten. Entomologische Nachrichten, 22: 337-343.
- HORN W., 1896d Die Cicindeliden der Dohrn'schen Sammlung. Stettiner entomologische Zeitung, 57: 164-177.
- HORN W., 1897a Zwei neue Cicindeliden. Entomologische Nachrichten, 23: 98-99.
- HORN W., 1897b 4 neue Cicindeliden aus Afrika. Entomologische Nachrichten, 23: 237-240.
- HORN W., 1897c Novae Cicindelidarum species. Notes from the Leyden Museum, 19: 235-240.
- HORN W., 1897d Ueber einige Typen der Dokhtourow'schen Cicindeliden-Sammlung. Deutsche entomologische Zeitschrift, 62.
- HORN W., 1898a Zwei neue *Myrmecopterae* vom südlichen Africa. Entomologische Nachrichten, 24: 347-348.
- HORN W., 1898b Ten new species of Cicindelidae. Notes from the Leyden Museum, 20: 101-108.
- HORN W., 1899a Ueber das System der Cicindeliden. Deutsche entomologische Zeitschrift, 33-51.
- HORN W., 1899b Ueber einige alte und neue Cicindeliden. Deutsche entomologische Zeitschrift, 52-54.
- HORN W., 1899c Neue afrikanische Cicindeliden. Deutsche entomologische Zeitschrift, 381-382.
- HORN W., 1900a De novis Cicindelidarum speciebus. Deutsche entomologische Zeitschrift, 193-212.
- HORN W., 1900b 7 neue Cicindelen. Deutsche entomologische Zeitschrift, 361-365.
- HORN W., 1900c Zum Studium der Cicindeliden. Deutsche entomologische Zeitschrift, 214-218.

HORN W., 1901 - Ueber einige Süd-Africa-Cicindeliden. Deutsche entomologische Zeitschrift, 123-124.

- HORN W., 1903a Ueber die Cicindeliden-Ausbeute von Guy A. K. Marshall aus Rhodesia, Manica und Gazaland. Deutsche entomologische Zeitschrift, 315-320.
- HORN W., 1903b *Dromica (Myrmecoptera) Schaumi* m. subsp. *Ertli* nov. var.. Deutsche entomologische Zeitschrift, 320.
- HORN W. 1903c 3 neue Cicindeliden vom tropischen Ost-Afrika. Deutsche entomologische Zeitschrift, 421-422.
- HORN W., 1904a Ueber die Cicindeliden-Sammlungen von Paris und London. Deutsche entomologische Zeitschrift, 81-99.
- HORN W., 1904b 4 neue Cicindeliden gesammelt von den Herren Oscar Neumann und Baron von Erlanger auf ihrer Expedition vom Roten Meer zum Nil. Deutsche entomologische Zeitschrift, 423-427.
- HORN W., 1905 Systematischer Index der Cicindeliden. Deutsche entomologische Zeitschrift, Beiheft, 1-56.
- HORN W., 1906 Beitrag zur Erkenntnis der Zeichnungs-Abänderungen bei Cicindeliden. Deutsche entomologische Zeitschrift, 173-174, pl. I.
- HORN W., 1907 Neues über *Odontochila*, *Cicindela* und *Dromica*. Stettiner entomologische Zeitung, 68: 327-336.
- HORN W., 1908a Two new *Cosmema*-species (Cicindelidae: Coleoptera) of the *auropunctata*-group, from Angola. Notes from the Leyden Museum, 30: 31-32.
- HORN W., 1908b: Cicindelinae, pp. 93-100. In: L. Schultze, Forschungsreise im westlichen und zentralen Südafrika ausgeführt in den Jahren 1903-1905. Denkschriften der Medizinischnaturwissenschaftlichen Gesellschaft, Jena, 13.
- HORN W., 1908c Coleoptera Adephaga, Fam. Carabidae, Subfam. Cicindelinae, pp. 1-104, pls. 1-5. In: P. Wytsman (ed.), Genera Insectorum, Fasc. 82A.
- HORN W., 1909a Fünf neue *Dromicae* (Col.). Deutsche entomologische Zeitschrift, 90-93.
- HORN W., 1909b [Über die Unterscheidung von *Cosmema lateralis* Boh. und *C. aspera* Dokht. (= *granulata* Dokht.)]. Deutsche entomologische Zeitschrift, 579-580.
- HORN W., 1909c [Cosmema albicinctella Bat., marginella Boh. und alboclavata Dokht.]. Deutsche entomologische Zeitschrift, 581.
- HORN W., 1909d Drei neue Dromica-Arten. Entomologische Rundschau, 26: 101-102.
- HORN W., 1910a Coleoptera. 20. Cicindelidae, pp. 399-402. In: Y. Sjöstedt, Wissenschaftliche Ergebnisse der Schwedischen Zoologische Expedition nach dem Kilimandjaro, dem Meru und den umgebenden Massaisteppen Deutsch-Ostafrikas 1905-1906, 1.
- HORN W., 1910b Coleoptera Adephaga, Fam. Carabidae, Subfam. Cicindelinae, pp. 105-208, pls. 6-15. In: P. Wytsman (ed.), Genera Insectorum, Fasc. 82B.
- HORN W., 1911 Cicindelinae. Wissensch. Ergebnisse der deutsches Zentral-Afrika-Expeditionen 1907-1908 unter Führung Adolf Friedrich, Herzog zu Mecklenburg, 3: 461-467. Leipzig.
- HORN W., 1913 Cicindelinae de l'Afrique tropicale, principalement du Congo Belge. Revue de Zoologie africaine, 2: 259-279.
- HORN W., 1914a 50 neue Cicindelinae. Archiv für Naturgeschichte, 79, Abt. A: 1-33.
- HORN W., 1914b Les Cicindelinae des environs de Kapiri (Congo Belge). Revue de Zoologie africaine, 3: 421-424.

- HORN W., 1915 Coleoptera Adephaga, Fam. Carabidae, Subfam. Cicindelinae, pp. 209-486, pls. 16-23. In: P. Wytsman (ed.), Genera Insectorum, Fasc. 82C.
- HORN W., 1921 Beitrag zur Faunistik und Lebensweise der Cicindelinae des tropischen Afrika. I. Liste der von Herrn Geheimrat Methner in Deutsch-Ostafrika während der Jahre 1901-1916 gesammelten Cicindelinen. Entomologische Blätter, 17: 172-178.
- HORN W., 1922 Studien über neue und alte Cicindelinen (Col.) (Neubeschreibungen, Synonymie, Faunistik). Zoologische Mededeelingen, 7: 90-111.
- HORN W., 1923 Zur Systematik, Geographie und Lebensweise der Cicindelinae (Col.). Zoologische Jahrbuch, 47, Abteilung für Systematik, 309-330.
- HORN W., 1925a Three new *Dromica* species (Coleoptera) from Rhodesia. Proceedings of the Rhodesian scientific Association, (1924/25) 23: 23-24.
- HORN W., 1925b Über 16 alte und neue Cicindeliden der Welt. Entomologische Blätter, 21: 131-139.
- HORN W., 1926a Carabidae: Cicindelinae, pp. 1-345. In: S. Schenkling (ed.), Coleopterorum Catalogus, Pars 86. W. Junk, Berlin.
- HORN W., 1926b Über neue und alte Cicindelinen der Welt. I. Über die Cicindelinen von Katanga. Entomologische Blätter, 22: 164-166.
- HORN W., 1927 Ueber "Monstrositäten" und verwandte Vorgänge bei Cicindelinen. Entomologische Mitteilungen, 16: 471-477.
- HORN W., 1929a Über die Cicindelinen von Katanga (nebst drei neuen Rassen aus Nachbargeibieten). Stettiner entomologische Zeitung, 90: 308-324.
- HORN W., 1929b Ueber einige orientalische und aethiopische Cicindelinae-Genera. Entomologische Nachrichtsblatt, 3: 4-9.
- HORN W., 1931 Über tropisch-afrikanische Cicindelinen. II. Zwei neue Cicindelinen-Rasse von Katanga. Bulletin mensuel de la Société des Naturalistes de Luxembourg (Monatsber. Gesellschaft luxemburger Naturfreunde), (N.S.) 25: 43-45.
- HORN W., 1932a Über die Angola-Cicindeliden-Ausbeute der Mission Scientifique Suisse 1928-29 (nebst Beschreibung einer neuen *Dromica*-Rasse vom Kenya Distrikt). Mitteilungen der schweizerischer entomologische Gesellschaft, 15: 200-201.
- HORN W., 1932b Contributions à l'étude de la faune du Mozambique. Voyage de M. P. Lesne (1928-1929). 8.e Note. Coléoptères, Cicindelinae. Memórias e Estudos do Museu Zoológico da Universidade de Coimbra, Sér. I, N° 58: 1-6.
- HORN W., 1935a Über das Genus *Dromica* (Cicind.: Col.). Natuurhistorisch Maandblad, 24: 101-103.
- HORN W., 1935b Über die Coleopteren-Ausbeute der II. Schweizer wissenschaftlichen Expedition nach Angola 1932/33. I. Cicindeliden. Stettiner entomologische Zeitung, 96: 161-163.
- HORN W., 1936 Viaggio del Prof. Lidio Cipriani in Rodesia (1929). Cicindelidae. Bollettino della Società entomologica italiana, 68: 144.
- HORN W., 1938 2000 Zeichnungen von Cicindelinae. Entomologische Beihefte aus Berlin-Dahlem, 5: 1-72, pls. 1-90.
- HORN W., 1939 On two new races of Cicindelinae from Kenya Colony and notes on others. Journal of the East Africa and Uganda natural History Society, 14: 152-153.
- HORN W., 1940 96 Zeichnungen von *Dromicae*. Arbeiten der morphologische und taxonomische Entomologie aus Berlin-Dahlem, 7: 269-276, pls. 9-23.

HORN W. & KAHLE I., 1935-37 - Über entomologischen Sammlungen, Entomologien & Entomologie (Ein Beitrag zur Geschichte der Entomologie). Entomologische Beihefte, Berlin-Dahlem, 2-4: 1-536, Pls. I-XXXVIII.

- Klug F., 1834 Jahrbücher der Insektenkunde, mit besonderer Rücksicht auf die Sammlung im Königl. Museum zu Berlin. Berlin, Verlag von Theod. Chr. Friedr. Enslin, VIII+296 pp.
- Kolbe H.J., 1897 Coleopteren. Die Käfer Deutsch-Ost-Afrikas. Berlin, 368 pp., pls. I-IV.
- Kossmat F., 1907 Geologie der Inseln Sokotra, Semha und Abd El Kuri. Denkschrift der Kaiserlichen Akademie der Wissenschaften, Mathematisch-naturwissenschaftliche Klasse, 71: 1-62.
- JEANNEL R., 1961 La Gondwanie et le peuplement de l'Afrique. Annales du Musée royal de l'Afrique centrale, Tervuren, Belgique. Série in-8°, Sciences Zoologiques, 102: 1-161.
- JUNOD H.-A., 1899 La faune entomologique du Delagoa. I. Coléoptères. Bulletin de la Société vaudoise des Sciences naturelles, 35, 132: 162-190, pls. V-VI.
- LATREILLE P.A. & DEJEAN P.F.M.A., 1822 Histoire naturelle et iconographie des Insectes Coléoptères d'Europe. Première Livraison. Paris, chez Crevot, 67 pp., pls. I-V.
- MANDL K., 1963 Über neue Cicindeliden-Aufsammlungen aus tropischen Ländern (Col.). Entomologischen Arbeiten aus dem Museum G. Frey, 14: 575-592.
- MANDL K., 1968 Coleoptera aus Nordostafrika. Cicindelinae und Carabidae: Carabini. Notulae entomologicae, 48: 126-130.
- MARSHALL G.A.K. & POULTON E.B., 1902 Five years observations and experiments (1896-1901) on the bionomics of South African insects, chiefly directed to the investigation of mimicry and warning colours. 31. Warning colours and mimicry (almost wholly Müllerian) in South African Coleoptera. Transactions of the entomological Society of London, 508-515, pl. XVII.
- MÜLLER G., 1939 Missione Biologica nel Paese dei Borana, vol. II. Raccolte zoologiche. Parte I. Coleoptera. Reale Accademia d'Italia, Centro Studi per l'Africa Orientale Italiana, Roma, 169-309.
- OATES F., 1881 Matabele Land and the Victoria Falls. A naturalist's wanderings in the interior of South Africa. London, 383 pp.
- PEARSON D.L. & CASSOLA F., 1992 World-wide species richness patterns of tiger beetles (Coleoptera: Cicindelidae): Indicator taxon for biodiversity and conservation studies. Conservation Biology, 6: 376-391.
- PÉRINGUEY L., 1888 Second contribution to the South-African Coleopterous fauna. Family: Cicindelidae. Transactions of the South African philosophical Society, 4: 67-72.
- PÉRINGUEY L., 1892a Third contribution to the South-African Coleopterous fauna. On beetles collected in tropical south-western Africa by Mr. A. W. Eriksson. Family: Cicindelidae. Transactions of the South African philosophical Society, 7: 1-5.
- PÉRINGUEY L., 1892b Fourth contribution to the South African Coleopterous fauna. Description of new Coleoptera in the South African Museum. Transactions of the South African philosophical Society, 6: 95-96.
- PÉRINGUEY L., 1893 Descriptive catalogue of the Coleoptera of South Africa. Part I. Order: Coleoptera. Family: Cicindelidae. Transactions of the South African philosophical Society, 7 (1892): 1-100, pls. I-II.
- PÉRINGUEY L., 1894 Description of new Cicindelidae from Mashunaland. Transactions of the entomological Society of London, 447-453.

- PÉRINGUEY L., 1896 Descriptive catalogue of the Coleoptera of South Africa. Family Cicindelidae. Supplement. Transactions of the South African philosophical Society, 7: 99-121.
- PÉRINGUEY L., 1898 Descriptive catalogue of the Coleoptera of South Africa. Family Cicindelidae. Second Supplement. Transactions of the South African philosophical Society, 10: 303-314.
- PÉRINGUEY L., 1904 Some new Coleoptera collected by Rev. Henri A. Junod at Shilouvane near Leydsdorp, in the Transvaal. Novitates zoologicae, 11: 448-449.
- PÉRINGUEY L., 1908 Seventh contribution to the South African Coleopterous fauna. Annals of the South African Museum, 5: 271-272.
- Putchkov A.V. & Arndt E., 1994 Preliminary list of known tiger beetle larvae (Coleoptera, Cicindelidae) of the world. Mitteilungen der schweizerischen entomologischen Gesellschaft, 67: 411-420.
- Putzeys J., 1880 Études sur les insectes de l'Afrique que se trouvent au Museum National de Lisbonne. Fam. Cicindelidae et Carabidae. Jornal de Sciencias mathematicas, physicas e naturales, 29: 21-48.
- Quedenteldt G., 1883 Verzeichnis der von Herrn Major a. D. von Mechow in Angola und am Quango-Strom gesammelten Cicindeliden und Carabiden. Berliner entomologische Zeitschrift, 27: 241-249.
- RAPP W.F., 1946 Zoogeographic distribution of Cicindelidae (Col.). Entomological monthly Magazine, 82: 224-225.
- RIVALIER É., 1950 Démembrement du genre *Cicindela* Linné (Travail préliminaire limité à la faune paléarctique). Revue française d'Entomologie, 17: 217-244.
- RIVALIER É., 1954 Démembrement du genre *Cicindela* Linné. II. Faune américaine. Revue française d'Entomologie, 21: 249-268.
- RIVALIER É., 1957 Démembrement du genre *Cicindela* Linné. III. Faune africano-malgache. Revue française d'Entomologie, 24: 312-342.
- RIVALIER É., 1961 Démembrement du genre *Cicindela* L. (suite). IV. Faune indomalaise. Revue française d'Entomologie, 28: 121-149.
- RIVALIER É., 1963 Démembrement du genre Cicindela L. (fin). V. Faune australienne (et liste récapitulative des genres et sous-genres proposés pour la faune mondiale). Revue française d'Entomologie, 30: 30-48.
- RIVALIER É., 1971 Remarques sur la tribu des Cicindelini (Col. Cicindelidae) et sa subdivision en sous-tribus. Nouvelle Revue d'Entomologie, 1: 135-143.
- Schaum H.R., 1861 Eine Decade neuer Cicindeliden aus dem tropischen Asien. Berliner entomologische Zeitschrift, 5: 68-80.
- Schüle P. & Werner K., 1999 A new species of *Dromica* from South Africa (Coleoptera: Cicindelidae). Entomologische Zeitschrift, 109 (11): 458-459.
- Schüle P. & Werner K., 2001 Revision of the genus *Dromica* Dejean, 1826. Part I: the *stutzeri*group (Coleoptera: Cicindelidae). Entomologia africana, 6 (2): 21-45.
- Stegemann F., 1930 Die Flügeldecken der Cicindelinae. Ein Beitrag zur Kenntnis der Insektencuticola. Zeitschrift für Morphologie und Ökologie der Tiere, 18: 1-73.
- TATUM T., 1851 Descriptions of new species of Coleopterous insects. Annals & Magazine of natural History, (2) 8: 49-51.
- THOMSON J., 1856 Description de dix-sept Coléoptères. Revue et Magasin de Zoologie, 472-483.
- TOMMASINI S. & MARINI M., 1988 Catalogo dei tipi del Museo Zoologico dell'Università di

CASSOLA

- Bologna. V. Coleotteri del Mozambico. Bollettino della Società entomologica italiana, 120 (2): 129-138.
- Wallengren H.D.J., 1881 Coleoptera Transvaaliensia. Bidrag till Kannedom om Transvaal-Landets i S. Afrika Coleopter-Fauna. Entomologsk Tidskrift, 2: 9-10.
- Wellman F. C. & Horn W., 1908 On the Cicindelinae of Angola. Proceedings of the Academy of natural Sciences of Philadelphia, 504-512.
- Werner K., 1987 Bemerkungen zu Sandlaufkäfern aus Südafrika (Coleoptera: Cicindelidae). Entomologische Zeitschrift, 97: 302-304.
- WERNER K., 1993a Die Sandlaufkäfer Kenias (Coleoptera, Cicindelidae). Lambillionea, 93: 51-76.
- Werner K., 1993b Die Sandlaufkäfer Äthiopiens (Coleoptera, Cicindelidae). Mitteilungen der Münchner entomologische Gesellschaft, 83: 3-38.
- Werner K., 1994 Neues über die Sandlaufkäfer Äthiopiens (Coleoptera, Cicindelidae). Mitteilungen der Münchner entomologische Gesellschaft, 84: 3-11.
- Werner K., 1995 *Dromicoida* gen. n. from West Africa, with description of a new species (Coleoptera: Cicindelidae). Koleopterologische Rundschau, 65: 19-22.
- Werner K., 1996 *Dromica lizleri* n. sp. from Ethiopia (Coleoptera, Cicindelidae). Acta coleopterologica, 12: 57-59.
- Werner K., 1998 Notes and descriptions of new tiger beetle species from Tanzania (Coleoptera: Cicindelidae). Mitteilungen des internationalen Entomologischen Vereins, 23: 165-175.
- Werner K., 1999 Notes about African tiger beetles (Coleoptera, Cicindelidae). Entomologia africana, 4: 10-25.
- WERNER K., 2000a The Tiger Beetles of Africa. Volume 1. Taita Publishers, Hradec Kralove, 191 pp.
- WERNER K., 2000b The Tiger Beetles of Africa. Volume 2. Taita Publishers, Hradec Kralove, 207 pp.
- WERNER K. & DUDLEY C., 1998 Contribution to the knowledge of the Cicindelidae of Malawi (Coleoptera, Cicindelidae). Lambillionea, 98: 579-590.
- WERNER W. & SCHÜLE P., 2001 A new species of *Dromica* Dejean, 1826, from Malawi (Coleoptera: Cicindelidae). Entomologische Zeitschrift, 111 (9): 263-265.
- WERNER K. & WIESNER J., 1994 Die Cicindelidae von Namibia (Coleoptera). Lambillionea, 94: 49-80.
- WERNER K. & WIESNER J., 1995 Nachtrag zu "Die Cicindelidae von Namibia" (Coleoptera). Lambillionea, 95: 603-610.
- Westwood J.O., 1881 Entomology. Appendix IV, pp. 331-365. In: F. Oates, Matabele Land and the Victoria Falls. A naturalist's wanderings in the interior of South Africa. London, 383 pp.
- Wiesner J., 1992 Verzeichnis der Sandlaufkäfer der Welt. Checklist of the Tiger Beetles of the World. Verlag Erna Bauer, Keltern, 364 pp.
- Wiesner J., 2001 Results of Thomas Wiesner's explorations in southern Africa 1999 (Coleoptera: Cicindelidae). Entomologische Zeitschrift, 111 (2): 53-57.

Author's address:

F. Cassola, Via Fulvio Tomassucci 12/20, I-00144 Roma, Italy. E-mail: fabiocassola@skynet.it

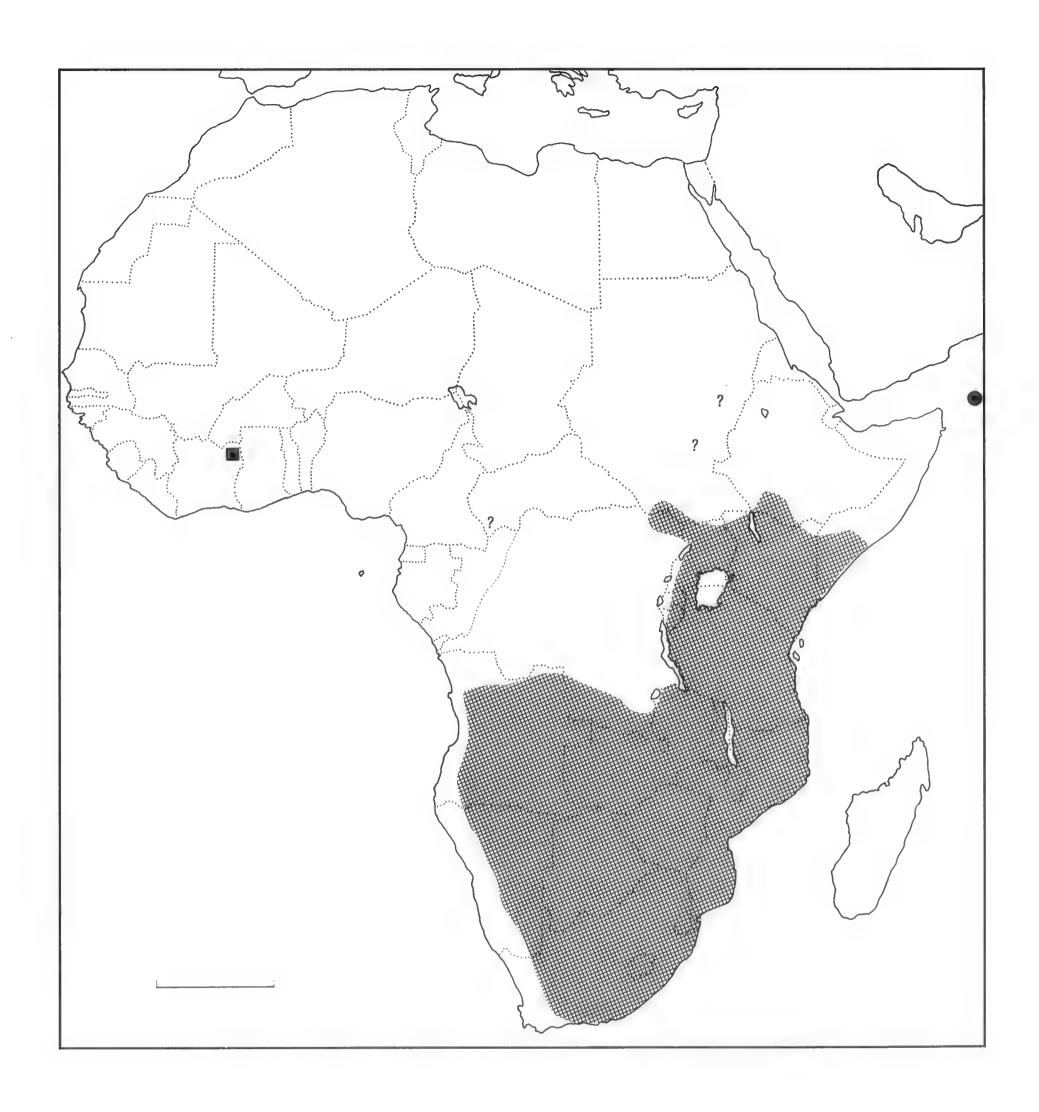
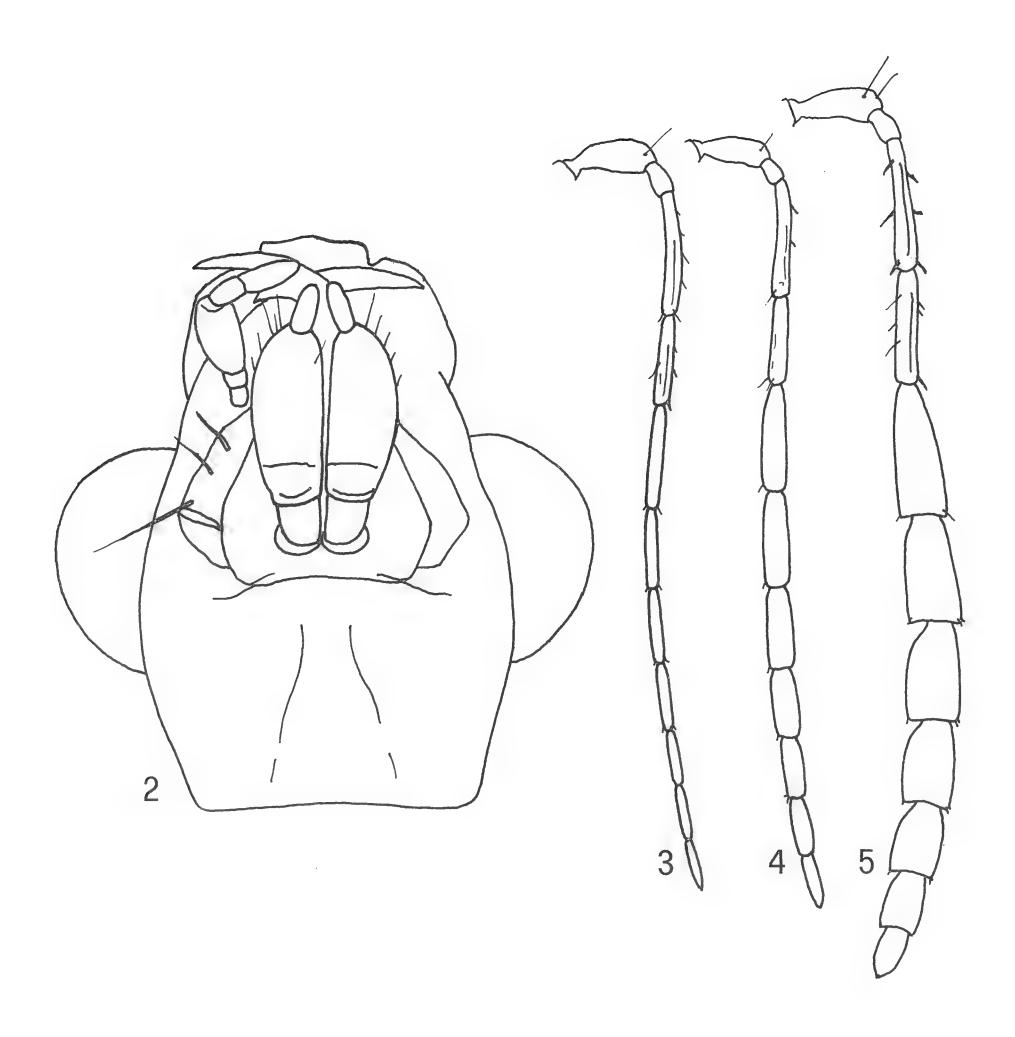
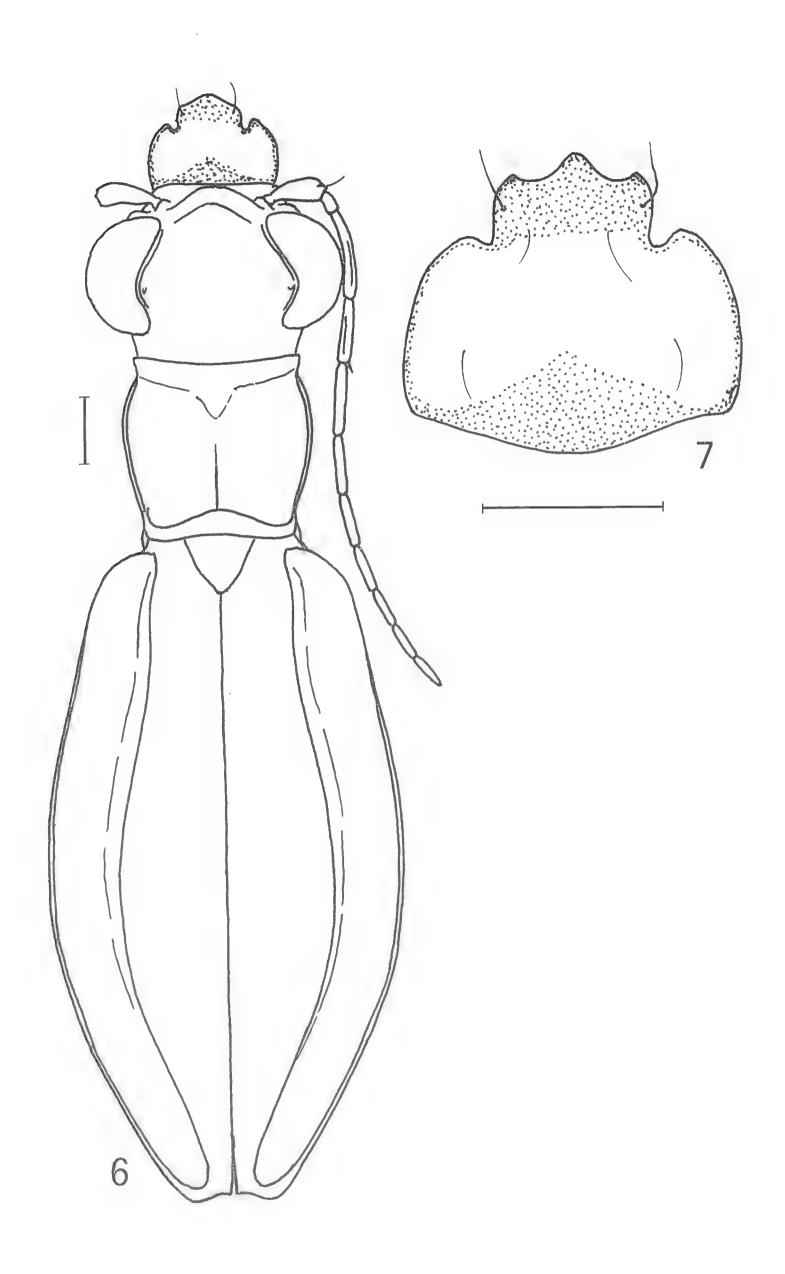


Fig. 1. Map showing the known geographical distribution of the genus *Dromica* s. auct.. Solid circle: *Socotrana*; solid square: *Dromicoida*. Scale segment: 1000 km.

CASSOLA CASSOLA

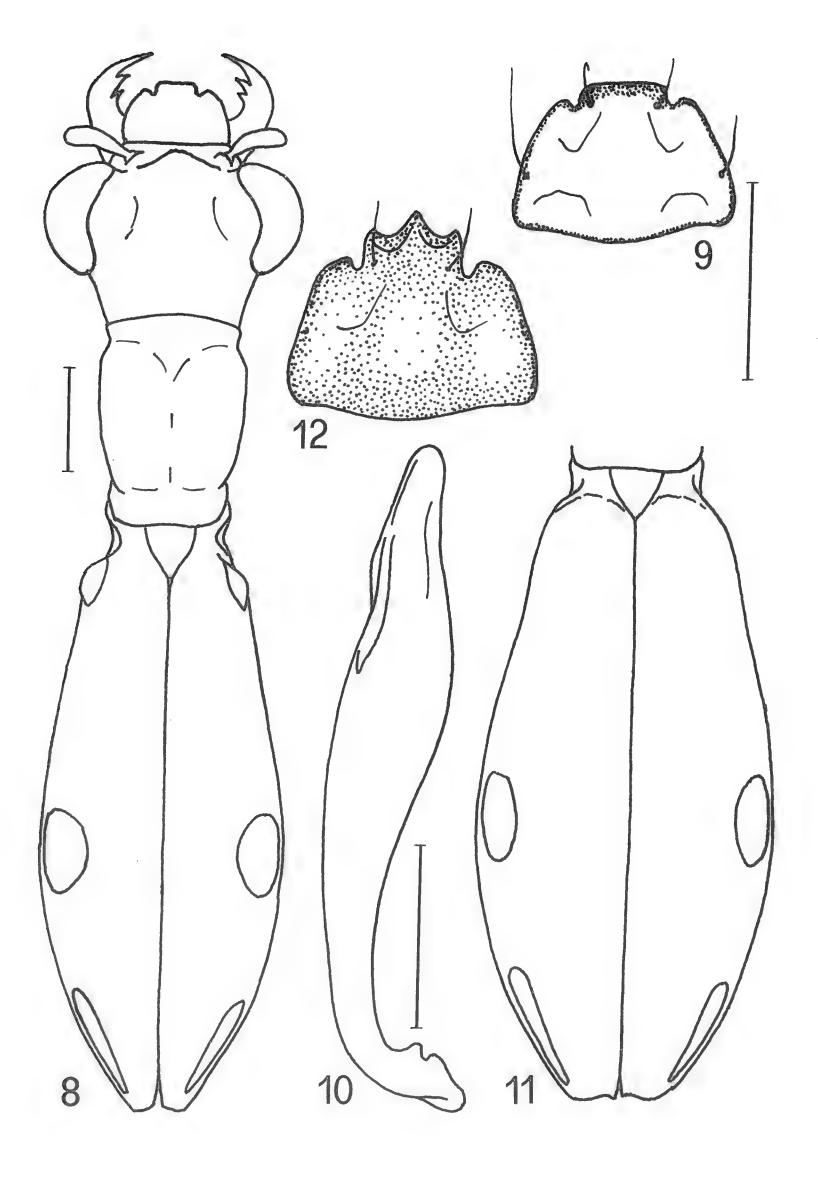


Figs 2-5. Morphological characters: 2 - inflated labial palpi (*D. junodi*, FCC), 3 - filiform antennae (*D. stalsi*), 4 - dilated antennae (*D. paulae*), 5 - foliated antennae (*D. differens*).

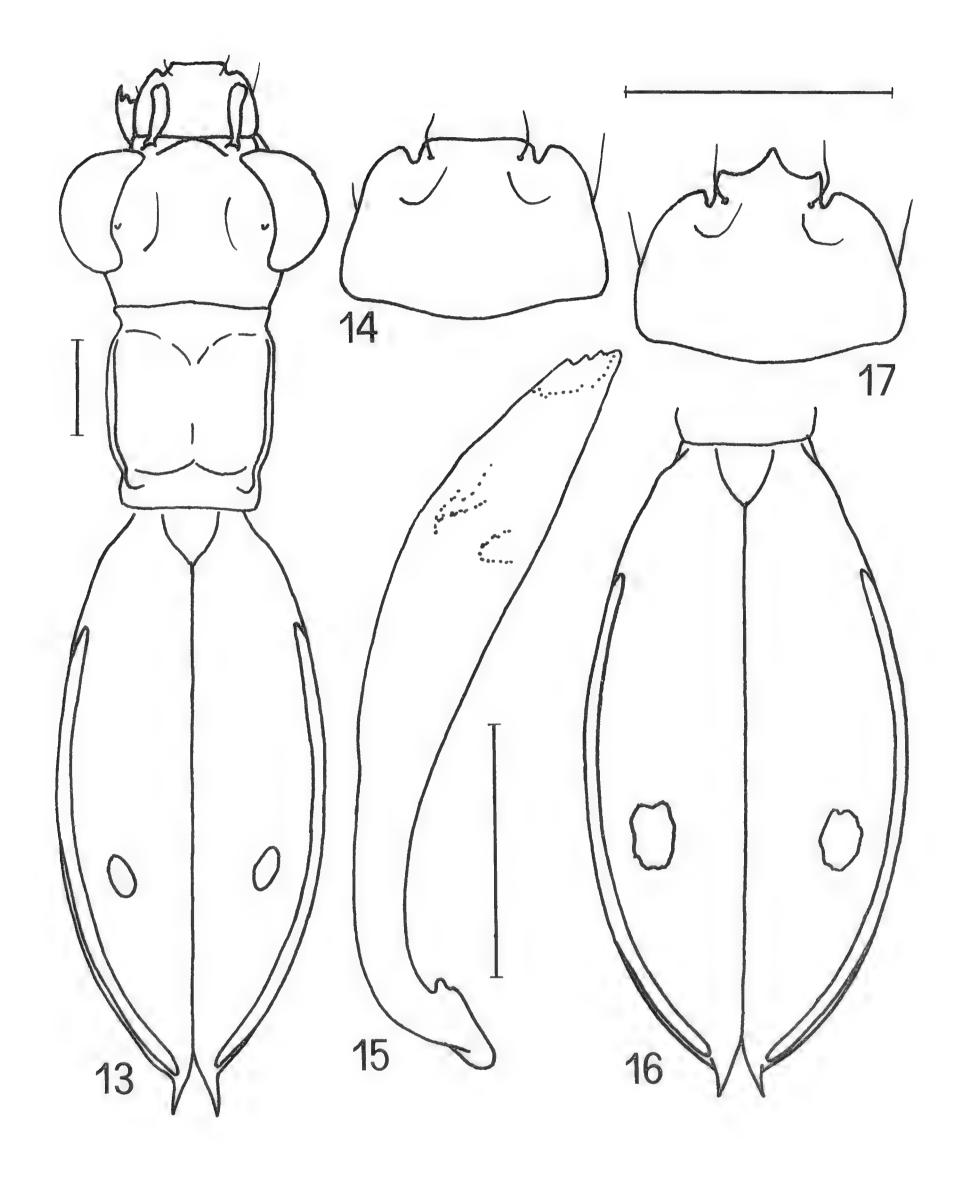


Figs 6-7. *Dromica stalsi* n. sp., female holotype from Roossenekal, Mpumalanga, South Africa (NCI): 6 – habitus, 7 - labrum. Scale segments: 1 mm.

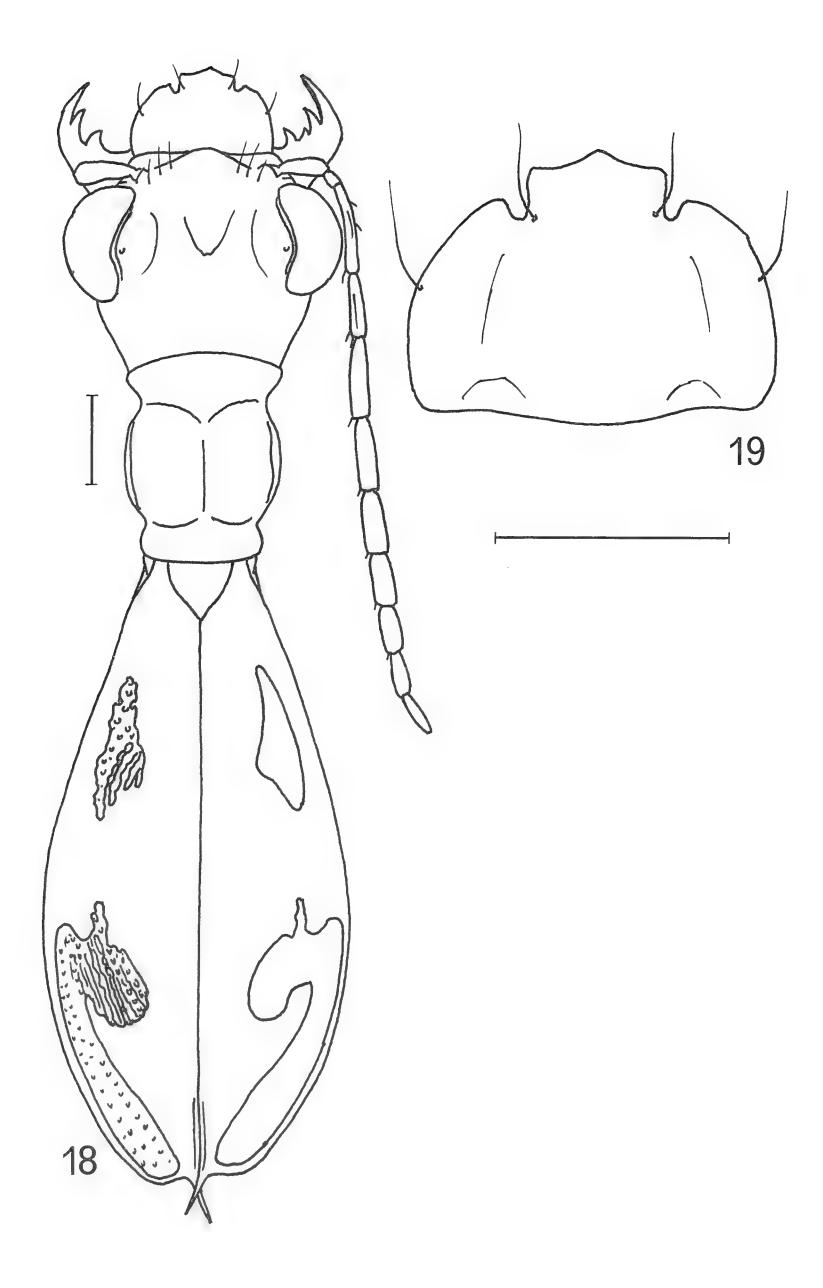
CASSOLA



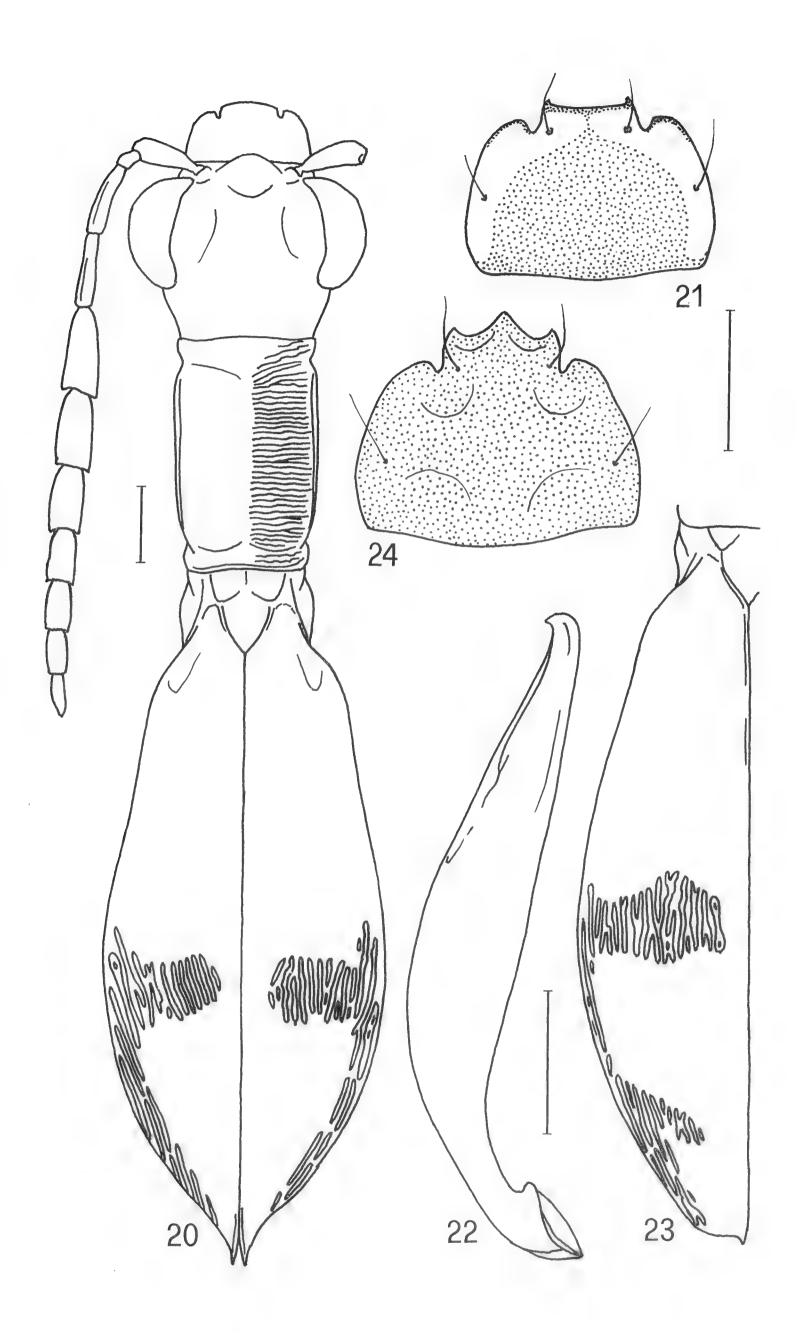
Figs 8-12. *Dromica schuelei* n. sp., male paratype from Ben Lavin NR, Louis Trichardt, Northern Province, South Africa (FCC): 8 – habitus, 9 – labrum, 10 – aedeagus; female paratype from same locality (FCC): 11 - left elytron, 12 - labrum. Scale segments: 1 mm.



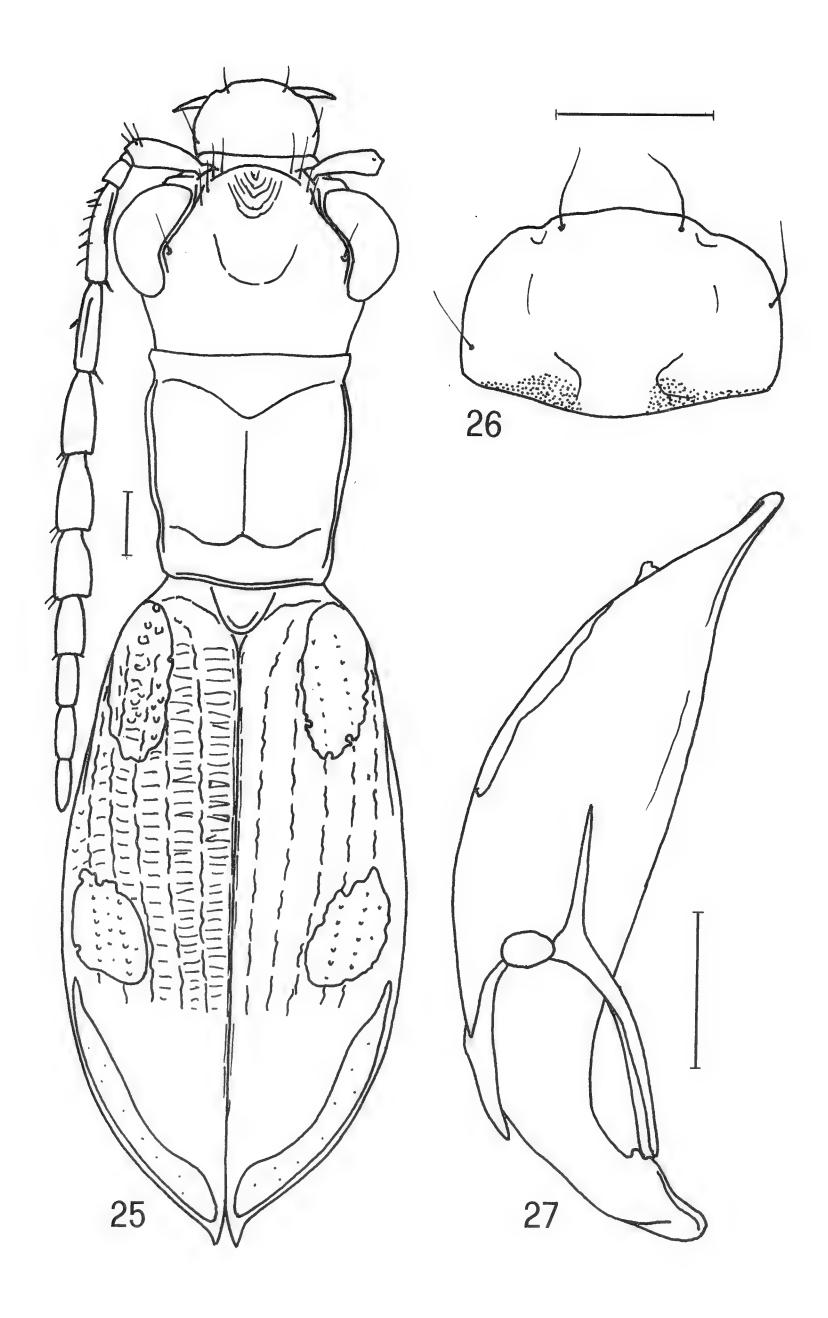
Figs 13-17. *Dromica pseudotenella* n. sp., male holotype from "Ndumu, Zulul." (FCC): 13 - habitus, 14 - labrum, 15 - aedeagus; female allotype from "6 mi. S of Pongola, Natal" (FCC): 16 - left elytron, 17 - labrum. Scale segments: 1 mm.



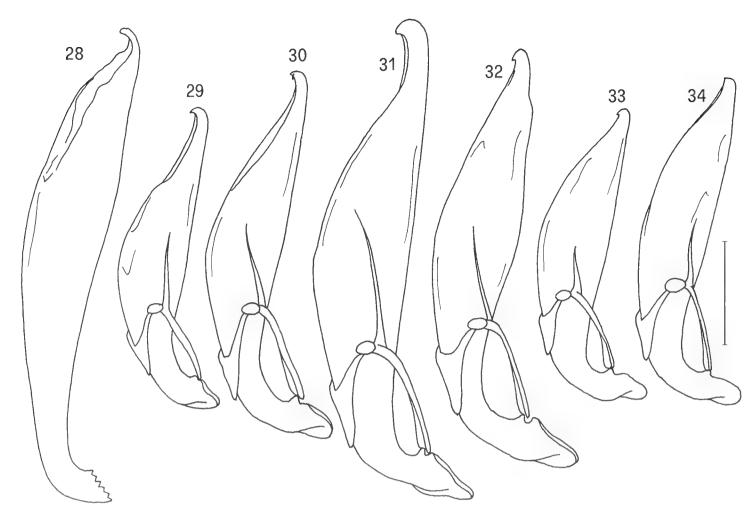
Figs 18-19. *Dromica paulae* n. sp., female holotype from the Arabuko-Sokoke Forest, Coast, Kenya (FCC): 18 - habitus, 19 - labrum. Scale segments: 1 mm.



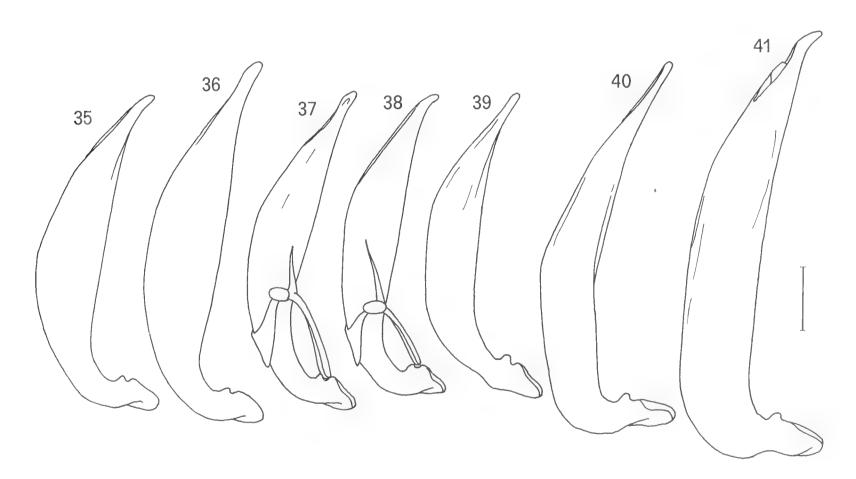
Figs 20-24. *Dromica zambiensis* n. sp., male paratype from "N. Rhodesia, N'Changa" (FCC): 20 - habitus, 21 - labrum, 22 - aedeagus; female paratype from "N.W. Rhodesia, Kashitu, N of Broken Hill" (FCC): 23 - left elytron, 24 - labrum. Scale segments: 1 mm.



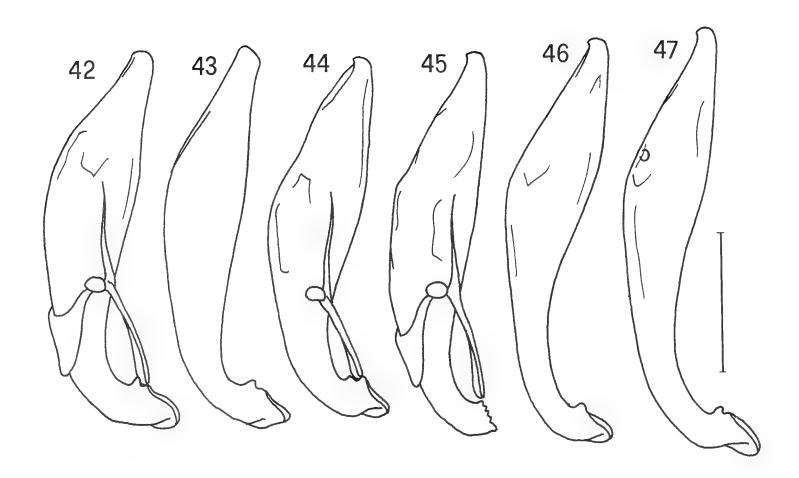
Figs 25-27. *Pseudodromica lerouxae* n. sp., male holotype from Roossenekal, Mpumalanga, South Africa (NCI): 25 - habitus, 26 - labrum, 27 - aedeagus. Scale segments: 1 mm.



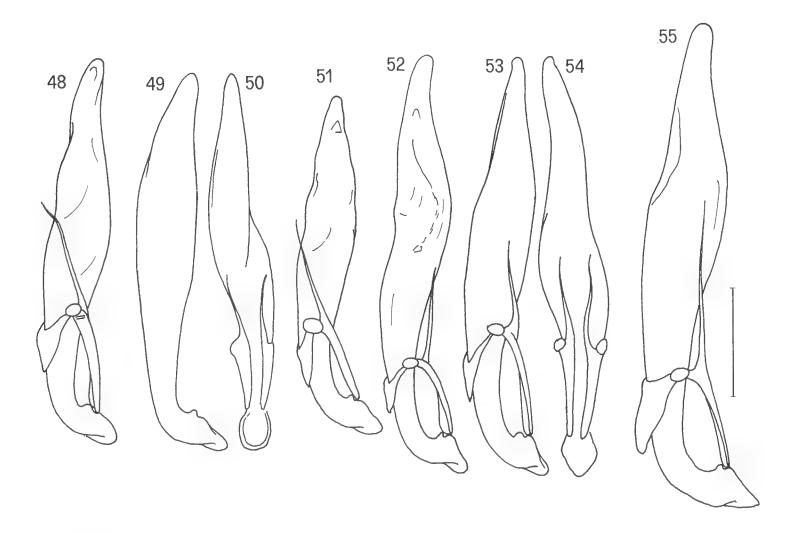
Figs 28-34. Male aedeagi of *Dromica furcata* (Boheman, 1848) and allied species: 28 - *furcata* (Nylstroom-Vaalwater, Northern Province, South Africa; FCC); 29 - *coarctata* (Grahamstown, Eastern Cape, South Africa; FCC); 30 - *pseudofurcata* (Willowmore, Eastern Cape, South Africa; FCC); 31 - *vittata* (Middelburg, Eastern Cape, South Africa; FCC); 32 - *miranda* (Maghaleen nr Zastron, Free State, South Africa; FCC); 33 - *endroedyi* (Piet Retief, Mpumalanga, South Africa; FCC); 34 - *pseudocoarctata* ("Vumba, S. Rhod.", Zimbabwe; topotype, FCC). Scale segment: 1 mm.



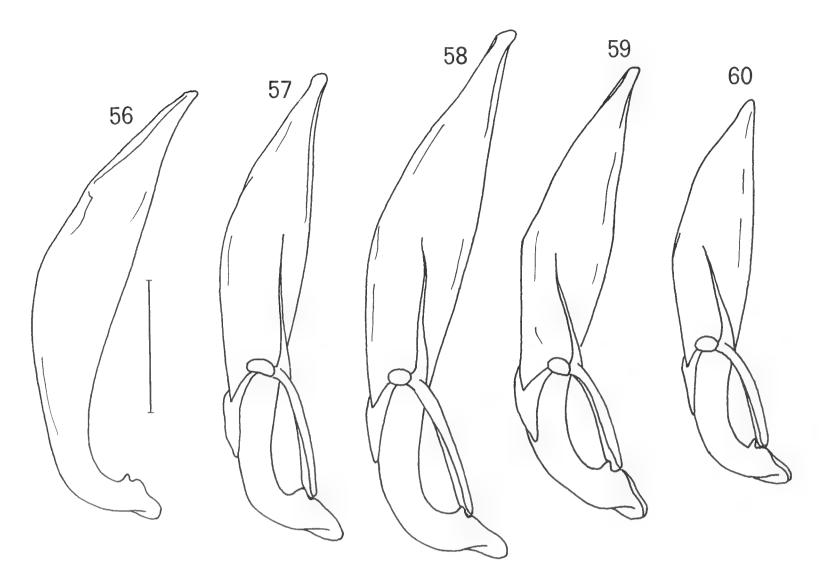
Figs 35-41. Male aedeagi of *Dromica sexmaculata* Chaudoir, 1860, and allied species: 35 - *sexmaculata* (Kruger NP: S of Letaba, Northern Province, South Africa; FCC); 36 - *citreoguttata* (8 km SE Barberton, Mpumalanga, South Africa; FCC); 37 - *mirabilis* (36 km S Piet Retief, Mpumalanga, South Africa; holotype, TMSA); 38 - *ambitiosa* (8 km SE Barberton, Mpumalanga, South Africa; FCC); 39 - *variolata* (Nyala GR, KwaZulu/Natal, South Africa; NCI); 40 - *kolbei* (Letsitele, Mpumalanga, South Africa; FCC); 41 - *helleri* (Griffin Mine, Northern Province, South Africa; FCC). Scale segment: 1 mm.



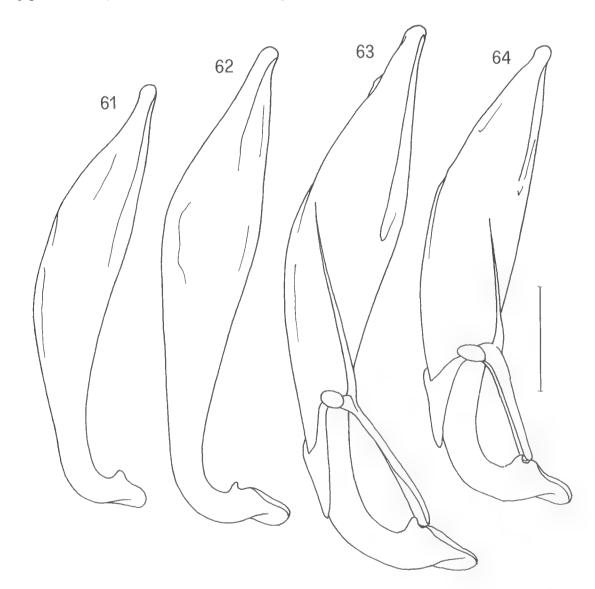
Figs 42-47. Male aedeagi of *Dromica lepida* (Boheman, 1848) and allied species: 42 - *lepida* (Krugersdorp, Gauteng, South Africa; FCC); 43 - *tenellula* ("Mt. Chirinda (Gazaland)", Zimbabwe; syntype, DEI); 44 - *apicalis* ("Salisbury, Mashonaland", Zimbabwe; FCC); 45 - *lepidula* (Hans Merensky NR, Northern Province, South Africa; FCC); 46 - *tenella* (Mica-Hoedspruit, Northern Province, South Africa; FCC); 47 - *leydenburgiana* (4 km S of Mica, Northern Province, South Africa; FCC). Scale segment: 1 mm.



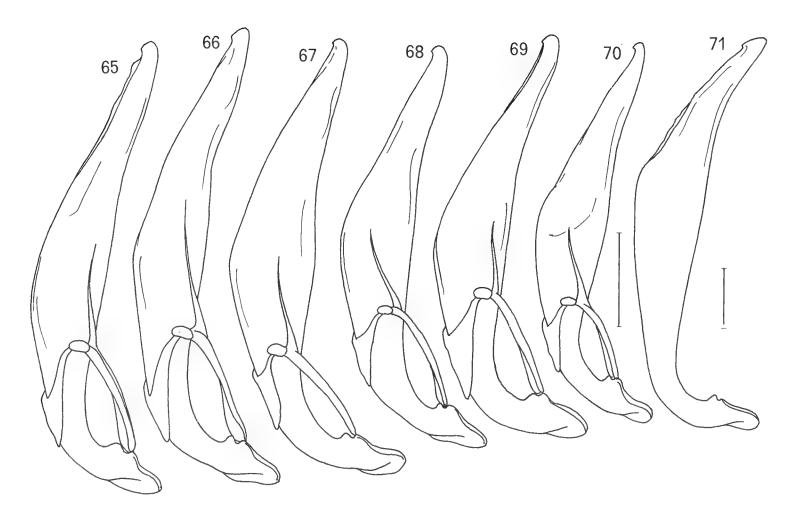
Figs 48-55. Male aedeagi of *Dromica elegantula* (Boheman, 1848) and allied species: 48 - *elegantula* ("Cafrerie"; FCC); 49, 50 - *convexicollis*, left and ventral views (Shilouvane, Northern Province, South Africa; DEI); 51 - *semilevis* ("Zulu-land"; holotype, DEI); 52 - *cristagalli* (Port St. Johns, Eastern Cape, South Africa; FCC); 53, 54 - *transitoria*, left and ventral views (Tembé, Mozambique; holotype, SAM); 55 - *angusticollis* (Salisbury, Zimbabwe; syntype, DEI). Scale segment: 1 mm.



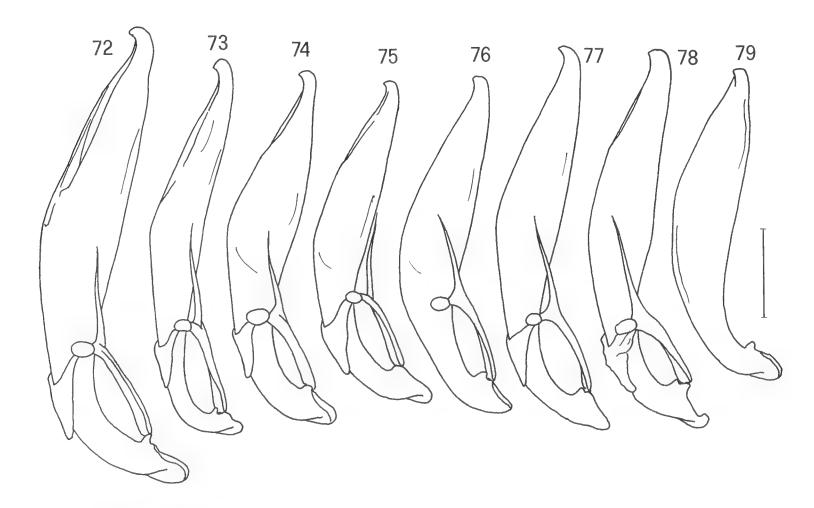
Figs 56-60. Male aedeagi of *Dromica schaumi* (W. Horn, 1892) and allied species: 56 - *schaumi* (Kikonko nr Kibondo, Kigoma, Tanzania; FCC); 57 - *taruensis* (Voi, Coast, Kenya; FCC); 58 - *seto-sipennis* (Mitundo, Dodoma, Tanzania; FCC); 59 - *oesterlei* (5 km S of Arba Minch, Gemu Gofa, Ethiopia; paratype, FCC); 60 - *batesi* (Lunga Lunga, Coast, Kenya; FCC). Scale segment: 1 mm.



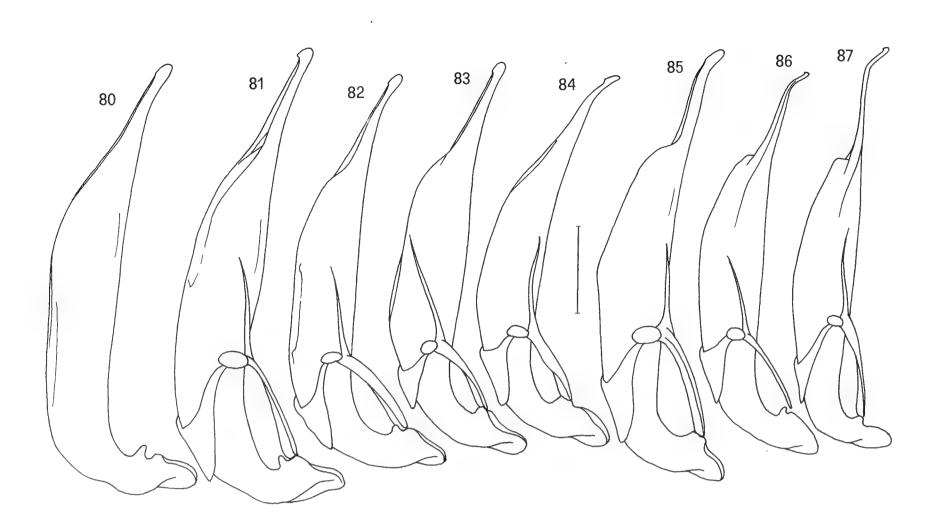
Figs 61-64. Male aedeagi of species of the *Dromica egregia*-group: 61 - *neumanni* (Ukerewe I., Mwanza, Tanzania; FCC); 62 - *tarsalis* (Kigonsera, Ruvuma, Tanzania; FCC); 63 - *elongatoplanata* (35 km S of Singida, Tanzania; FCC); 64 - *cupricollis* (Lubumbashi, Shaba, D.R. Congo; FCC). Scale segment: 1 mm.



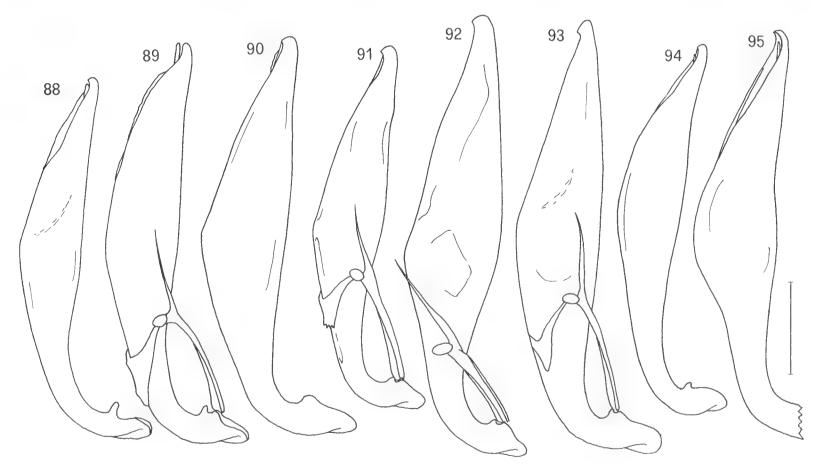
Figs 65-71. Male aedeagi of *Dromica marginella* (Boheman, 1848) and allied species: 65 - *lateralis* (Windhoek, Namibia; FCC); 66 - *aspera* (Uthoy, Gobabis, Namibia; FCC); 67 - *granulata* ("Zoutpan, Pta.", South Africa; FCC); 68 - *alboclavata* (20-25 km E of Pretoria, Gauteng, South Africa; FCC); 69 - *albicinctella* (Johannesburg, Gauteng, South Africa; FCC); 70 - *marginella* ("Soutpan, Pretoria", South Africa; FCC); 71 - *ramigera* (Outjo-Kalkfeld, Namibia; FCC). Scale segments: 1 mm.



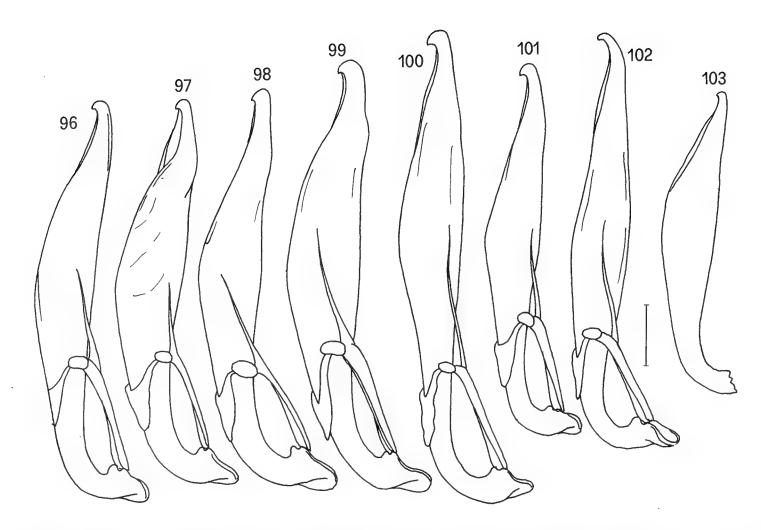
Figs 72-79. Male aedeagi of the *Dromica erikssoni*-group: 72 - *proepipleuralis* (Kafakumba, Shaba, D.R. Congo; FCC); 73 - *pentheri* (60 km N Bulawayo, Matabeleland North, Zimbabwe; FCC); 74 - *lunai* ("Angola: Caluango"; holotype, MRAC); 75 - *seriepunctata* (Kinda, Shaba, D.R. Congo; syntype, DEI); 76 - *nigroplagiata* (Riv. Sashila, Shaba, D.R. Congo; syntype, DEI); 77 - *mesothoracica* (11 mi. W Mbala, Zambia; CAS); 78 - *passosi* ("Angola: Ceilunga"; holotype, MRAC); 79 - *kanzenzensis* (Kanzenze, Shaba, D.R. Congo; FCC). Scale segment: 1 mm.



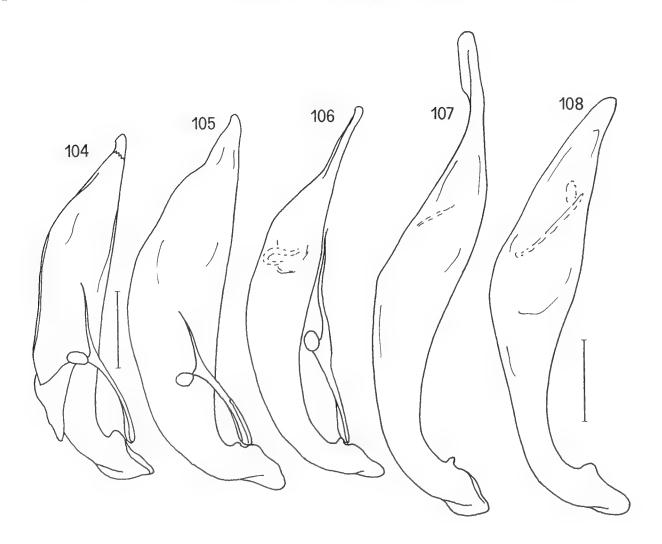
Figs 80-87. Male aedeagi of *Dromica nobilitata* (Gerstaecker, 1867) and allied species: 80 - *erlangeri* ("Sukh Plains, Uganda"; FCC); 81 - *nobilitata* (Voi, Kenya; FCC); 82 - *kenyana* (Arabuko-Sokoke Forest, Cast, Kenya; FCC); 83 - *somalica* (Afgoi, Somalia; holotype, FCC); 84 - *abukari* (Afgoi, Somalia; holotype, FCC); 85 - *crassereducta* ("Nyasaland, Mlanje"; FCC); 86 - *peringueyi* ("Mozamb. interior", Mozambique; holotype, DEI); 87 - *bennigseni* ("Ost-Afrika", syntype; DEI). Scale segment: 1 mm.



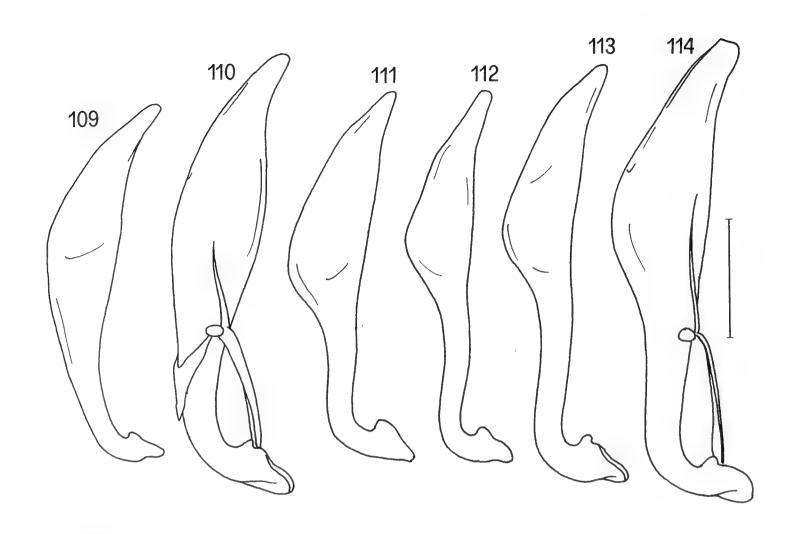
Figs 88-95. Male aedeagi of *Dromica consimilis* Bertoloni, 1858, and allied species: 88 - *consimilis* (Mkuzi GR, KwaZulu/Natal, South Africa; FCC); 89 - *spectabilis* (110 km S Francistown, Botswana; NCI); 90 - *flavovittata* ("Mozamb. interior", Mozambique; holotype, DEI); 91 - *bilunata* ("Salisbury, Rhodesia"; NCI); 92 - *laticollis* (Kruger NP, 20 km NE Shingwedzi, Northern Province, South Africa; FCC); 93 - *pilosifrons* ("N. Rhodesia"; holotype, DEI); 94 - *filicornis* (2 mi. W Hectorspring, Mpumalanga, South Africa; FCC); 95 - *limbata* (Nhambuica, Inhambane, Mozambique; FCC). Scale segment: 1 mm.



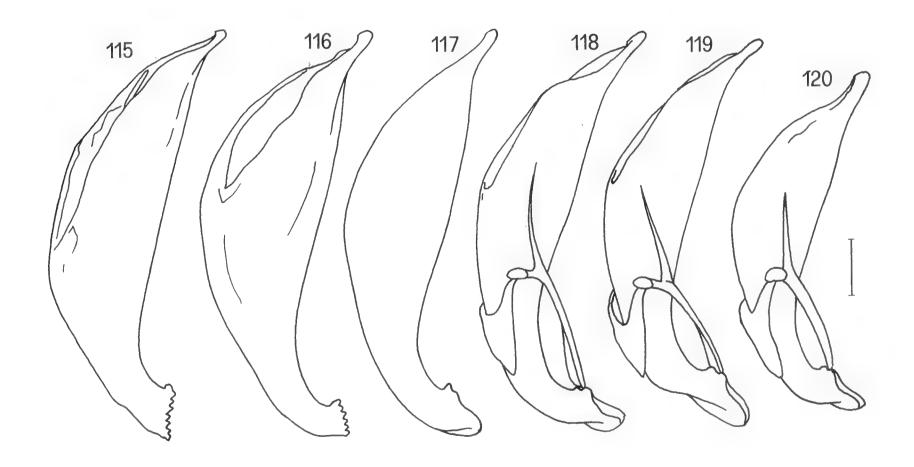
Figs 96-103. Male aedeagi of *Dromica bertolonii* (Thomson, 1856) and allied species: 96 - *bertolonii* (Nhambuica, Inhambane, Mozambique; FCC); 97 - *costata* (Gaborone, Botswana; FCC); 98 - *quadricostata* ("Shilouvane, près Leydsdorp", South Africa; FCC); 99 - *fossulata* (15 km S Boane, Mozambique; FCC); 100 - *limpopoiana* (Matopos NP, Bulawayo, Zimbabwe; FCC); 101 - *oneili* ("Fort Victoria", Masvingo, Zimbabwe; FCC); 102 - *prolongata* ("Inyanadzi River", Gaza, Mozambique; FCC); 103 - *junodi* ("Delagoa", Maputo, Mozambique; FCC). Scale segment: 1 mm.



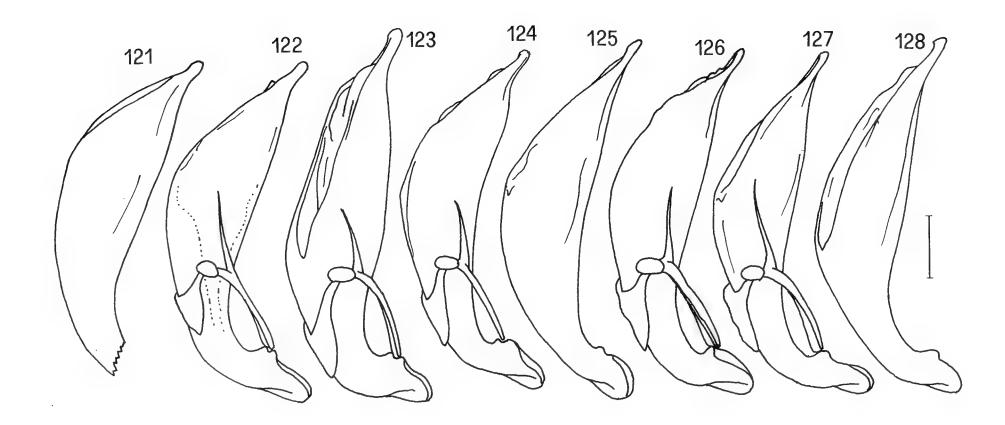
Figs 104-108. Male aedeagi of species "incertae sedis": 104 - *Dromica foveicollis* (Katanga, Dem. Rep. Congo; holotype, DEI); 105 - *Dromica dolosa* (Salisbury, Zimbabwe; syntype, DEI); 106 - *Bennigsenium? hexastictum* (Turiani, Tanganyika Terr.; BMNH); 107 - *Dromica* sp. "cf. *albivittis*" (Giants Castle, KwaZulu/Natal; TMSA); 108 - *Pseudodromica? bicostata* ("Süd-Angola"; holotype, DEI). Scale segments: 0.5 mm, 1 mm.



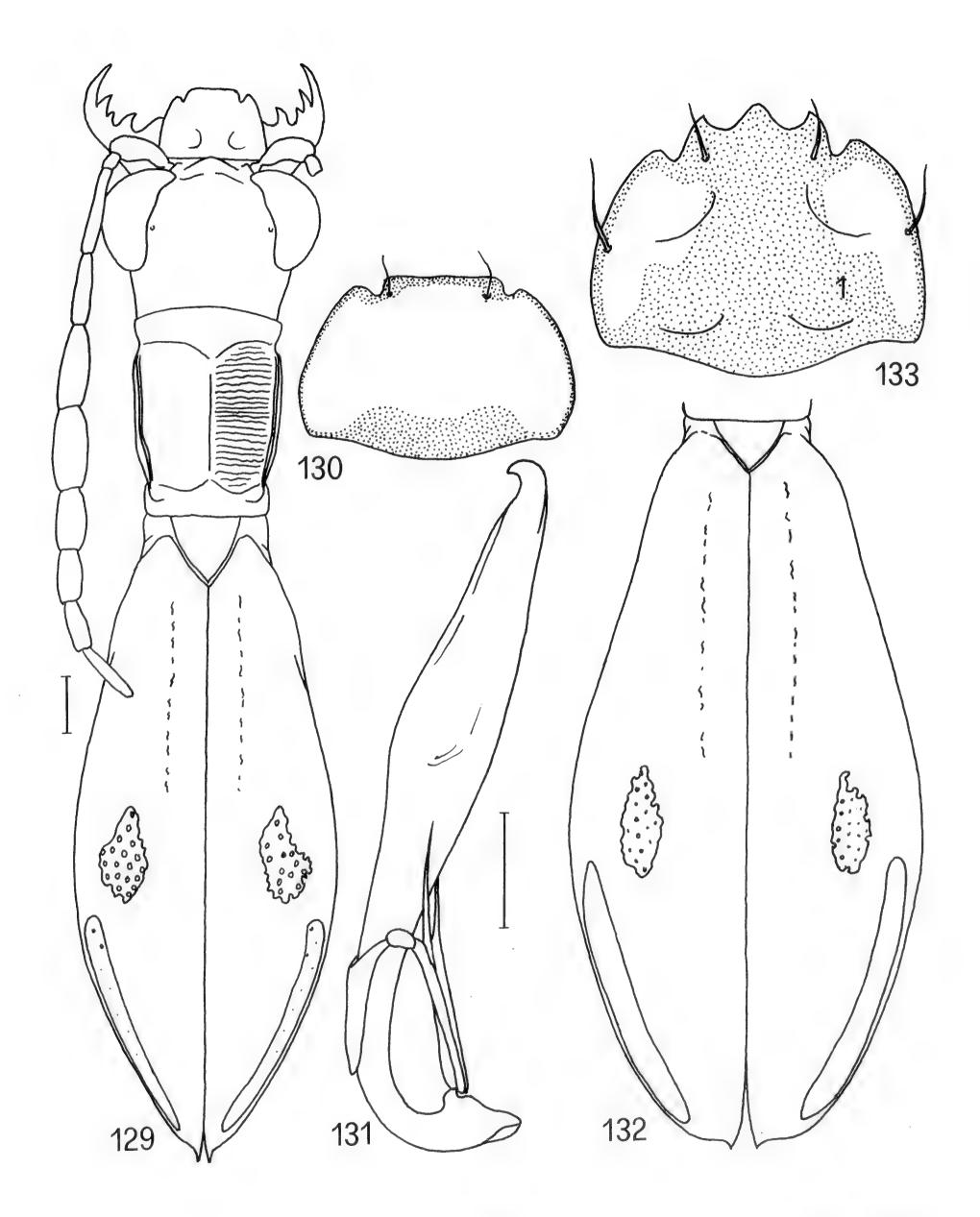
Figs 109-114. Male aedeagi of species of genus *Foveodromica*: 109 - *humeralis* ("Bailundo (Angola)"; syntype, DEI); 110 - *densepunctata* ("Zaire, Mitwaoua"; FCC); 111 - *wellmani* ("Angola, Chiyaka district"; syntype, DEI); 112 - *marginepunctata* ("Angola, Chiyaka district"; syntype, DEI); 113 - *grossula* ("Angola"; syntype, DEI); 114 - *auropunctata* (Tchivinguire, Huila, Angola; FCC). Scale segment: 1 mm.



Figs 115-120. Male aedeagi of *Pseudodromica clathrata* (Klug, 1834) and allied species: 115 - *clathrata* ("Pretoria"; FCC); 116 - *sculpturata* (40 km NE Oundee, KwaZulu/Natal, South Africa; FCC); 117 - *planifrons* ("Zululand"; holotype, DEI); 118 - *pseudoclathrata* (Hlane NP, Swaziland; FCC); 119 - *gunningi* ("Transvaal"; FCC); 120 - *tuberculata* (Piet Retief, Mpumalanga, South Africa; FCC). Scale segment: 1mm.



Figs 121-128. Male aedeagi of *Pseudodromica clathrata* (Klug, 1834) and allied species: 121 - *quinquecostata* ("Natal"; holotype, DEI); 122 - *marshallana* ("Umtali", Zimbabwe; syntype, DEI); 123 - *grandis* ("Kalachari, Winte or."; DEI); 124 - *invicta* ("Salisbury", Zimbabwe; FCC); 125 - *mauchii purpurascens* ("Tanganyika Terr.", Tanzania; FCC); 126 - *marshalli* (Jembya NR, Malawi; FCC); 127 - *polyhirmoides* (Matopos NP, Zimbabwe; FCC); 128 - *formosa* ("Mashunaland (Salisbury)"; syntype, DEI). Scale segment: 1 mm.



Figs 129-133. *Dromica brzoskai* n. sp., male paratype from Tshipise Adv. Eco. Lodge, Northern Province, South Africa (FCC): 129 - habitus, 130 - labrum, 131 - aedeagus; female paratype from 34 km E of Tshipise (FCC): 132 - elytra, 133 - labrum. Scale segments: 1 mm.

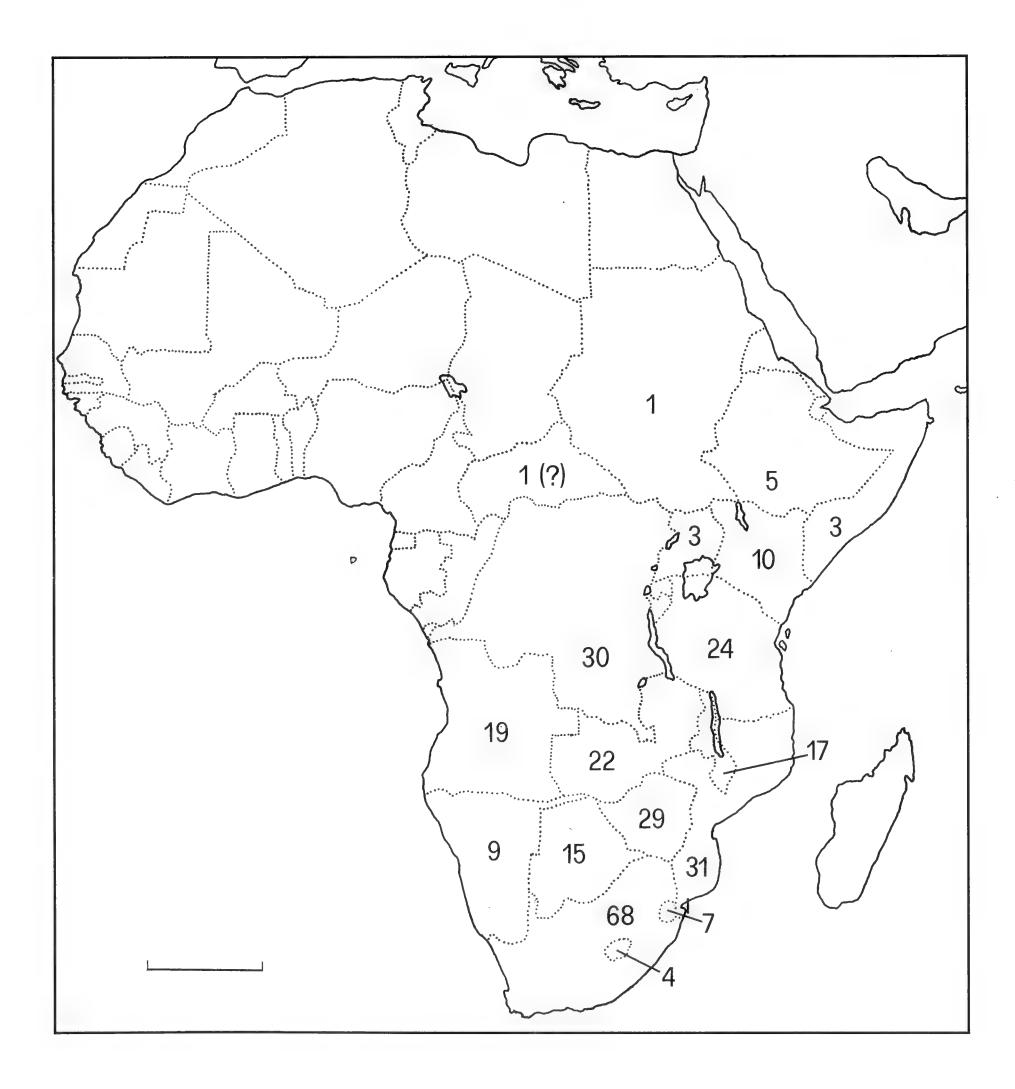


Fig. 134. Number of species occurring in individual African countries. Scale segment: 1000 km.



Fig. 135. Habitat of *Dromica abukari* Cassola, 1989 (Afgoi, Somalia) (Photo by F. Cassola).



Fig. 136. Habitat of *Dromica laticollis* W. Horn, 1903, *D. lepidula* (W. Horn, 1903) and *D. quadricostata* W. Horn, 1903 (20 km NW of Shingwedzi, Kruger NP, South Africa) (Photo by F. Cassola).

CASSOLA



Fig. 137. Female specimen of *Dromica laticollis* W. Horn, 1903, from 22 km W of Louis Trichardt, Northern Province (Photo by P. Schüle).



Fig. 138. Female specimen of *Dromica lepidula* W. Horn, 1903, from Hans Merensky Nature Reserve, Northern Province, South Africa (Photo by A. Oesterle).



Fig. 139. Habitat of *Dromica ambitiosa* (Péringuey, 1893), *D. citreoguttata* Chaudoir, 1864, and *Pseudodromica clathrata* (Klug, 1834) (8 km SE of Barberton on Bulembu road, Mpumalanga, South Africa) (Photo by F. Cassola).



Fig. 140. Female specimen of *Dromica mirabilis* Cassola, Schüle & Werner, 2000, from its type locality: 36 km S of Piet Retief, Mpumalanga, South Africa (Photo by P. Schüle).



Fig. 141. Female specimen of *Dromica kolbei* (W. Horn, 1897), from Ben Lavin NR nr Louis Trichardt, Northern Province, South Africa (Photo by P. Schüle).



Fig. 142. Mating pair of *Dromica kolbei* (W. Horn, 1897), from Ben Lavin NR nr Louis Trichardt, Northern Province, South Africa (Photo by P. Schüle).



Fig. 143. Female specimen of *Dromica sexmaculata* Chaudoir, 1860, from 3 km NE Mananga, Mpumalanga. South Africa/Swaziland border (Photo by A. Oesterle).



Fig. 144. Type locality of *Dromica oesterlei* Werner, 1993: 5 km S of Arba Minch, Gemu Gofa Province, Ethiopia, 1200 m (Photo by A. Oesterle).



Fig. 145. Female paratype specimen of *Dromica oesterlei* Werner, 1993 (Photo by A. Oesterle).



Fig. 146. Female specimen of *Dromica elongatoplanata* (W. Horn, 1922), from near Mitundo, Dodoma Province, Tanzania (Photo by A. Oesterle).



Fig. 147. Male specimen of *Dromica elongatoplanata* (W. Horn, 1922), from near Mitundo, Dodoma Province, Tanzania (Photo by A. Oesterle).



Fig. 148. Mating pair of *Dromica elongatoplanata* (W. Horn, 1922), from near Mitundo, Dodoma Province, Tanzania (Photo by A. Oesterle).



Fig. 149. Female specimen of *Dromica erlangeri* W. Horn, 1904, from Ethiopia, Gemu Gofa Province, 9 km W of Konso, 1500 m (Photo by A. Oesterle).

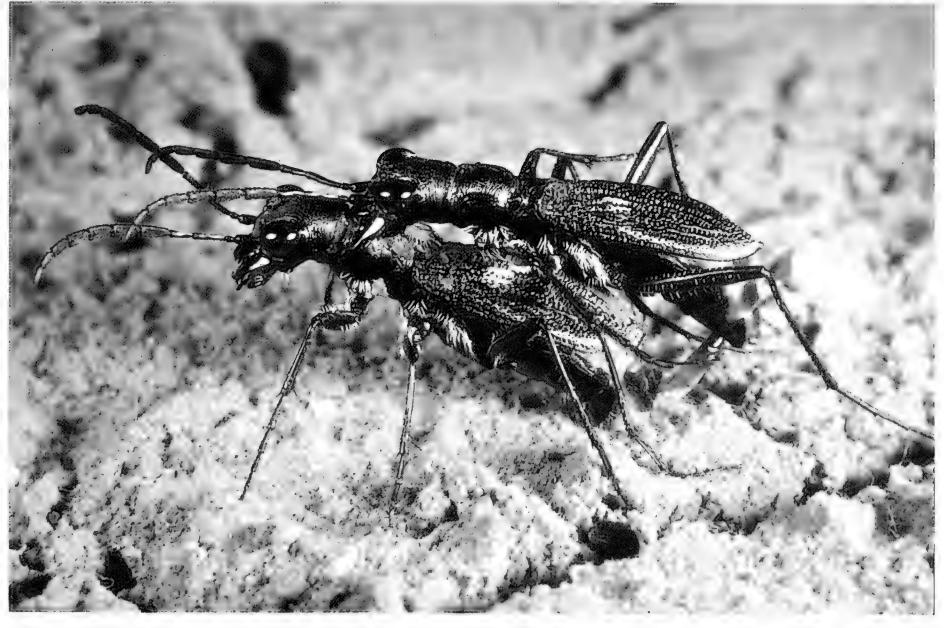


Fig. 150. Mating pair of *Dromica erlangeri* W. Horn, 1904, from Ethiopia, Gemu Gofa Province, 9 km W of Konso, 1500 m (Photo by A. Oesterle).

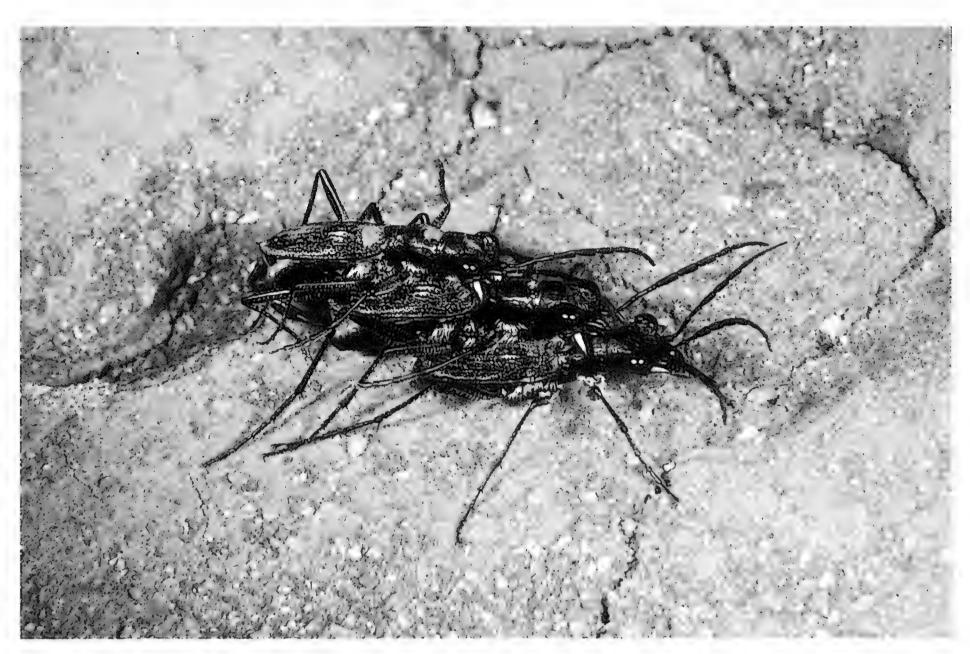


Fig. 151. Mating pair of *Dromica erlangeri* W. Horn, 1904, with an additional riding male: specimens from Ethiopia, Gemu Gofa Province, 9 km W of Konso, 1500 m (Photo by A. Oesterle).



Fig. 152. An overview of the Arabuko-Sokoke Forest, Coast, Kenya (type locality of *Dromica paulae* n. sp.). Two further *Dromica* species occur here too, *i.e. D. kenyana* Werner, 1993, and *D. schaumi* (W. Horn, 1892) (Photo by F. Cassola).



Fig. 153. Female specimen of *Dromica kenyana* Werner, 1993, hiding under a grass stem, photographed at the Arabuko-Sokoke Forest, Coast, Kenya, on 28 April 1995 (Photo by F. Cassola).



Fig. 154. Female specimen of *Dromica schaumi* (W. Horn, 1892), from Voi, Kenya (Photo by A. Oesterle).



Fig. 155. A female specimen of *Dromica consimilis* Bertoloni, 1858, from South Africa, Transvaal, Ben Lavin Nature Reserve, near Louis Trichardt, Northern Province, South Africa (Photo by A. Oesterle).



Fig. 156. Male specimen of *Dromica furcata* (Boheman, 1848), from Moloto, Northern Province, South Africa (Photo by A. Oesterle).

162 CASSOLA



Fig. 157. Male specimen of *Dromica quadricostata* W. Horn, 1903, from 22 km W of Louis Trichardt, Northern Province (Photo by P. Schüle).



Fig. 158. Female specimen of *Dromica quadricostata* W. Horn, 1903, from South Africa, Transvaal, Ben Lavin Nature Reserve, near Louis Trichardt, Northern Province, South Africa (Photo by A. Oesterle).



Fig. 159. A female specimen, full of eggs, of *Pseudodromica mauchii* (Bates) ssp. *purpurascens* (Bates, 1886), from near Mitundo, Dodoma Province, Tanzania (Photo by A. Oesterle).



Fig. 160. Female specimen of *Pseudodromica sculpturata* (Boheman, 1848), from Loteni NR, KwaZulu/Natal, South Africa (Photo by P. Schüle).

164 CASSOLA



Fig. 161. Female specimen of *Pseudodromica sculpturata* (Boheman, 1848), from same locality (Photo by A. Oesterle).

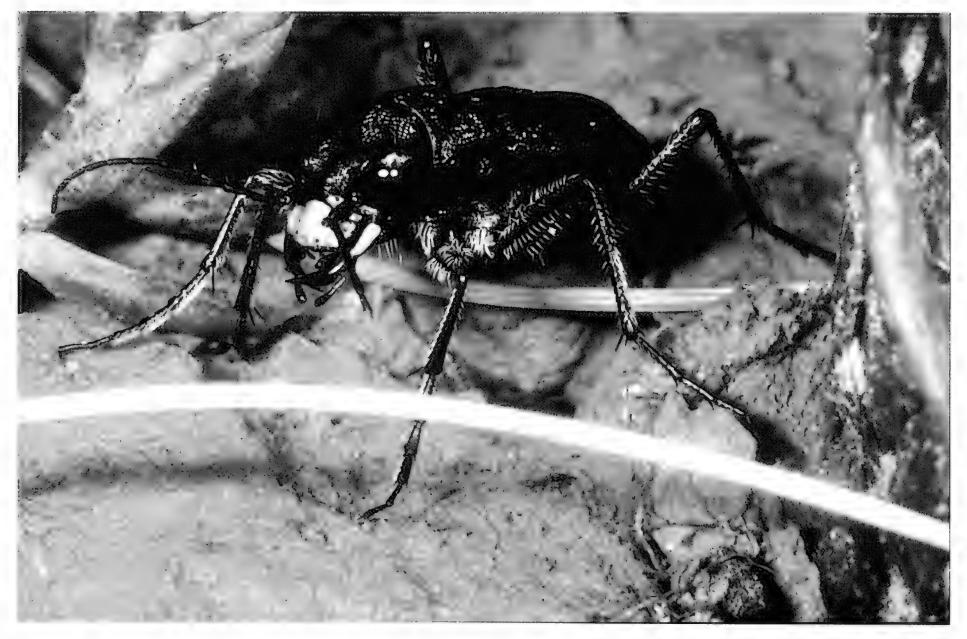


Fig. 162. Front view of a male specimen of *Pseudodromica sculpturata* (Boheman, 1848), from same locality (Photo by A. Oesterle).



Fig. 163. Male specimen of *Socotrana labroturrita* Cassola & Wranik, 1998, from near Suq, E of Hadiboh, Socotra Island, Yemen (Photo by H. Pohl).



Fig. 164. Batesian-Müllerian mimicry between (from left to right) two *Pseudodromica* species [*P. polyhirmoides* (Bates, 1872) and *P. oberprieleri* (Cassola, 1986)] and two carabid beetles [*Piezia angusticollis* Boheman, 1848, and *Cypholoba notata* (Perroud, 1846)] (Photo by A. Vigna Taglianti).



Fig. 165. Mimicry between (from left to right) a *Dromica* species [*D. cupricollis* W. Horn, 1913] and a carabid beetle [*Eccoptoptera cupricollis* Chaudoir ssp. *meridiana* Strohmeyer, 1928]. Mutillid wasps are certainly also involved in (Photo by A. Vigna Taglianti).



Fig. 166. Mutilloid mimicry between (from left to right) a *Dromica* species [*D. crassereducta* W. Horn, 1909], a carabid beetle [*Eccoptoptera mutilloides* (Bertoloni) ssp. *selenolepta* Strohmeyer, 1928], and a mutillid wasp (Photo by A. Vigna Taglianti).

Stefano SCALERCIO

La fauna a Lepidotteri Ropaloceri della Sila Greca (Italia meridionale)

(Lepidoptera Hesperioidea e Papilionoidea)*

Riassunto - In 44 punti di osservazione della Sila Greca sono state campionate le comunità a Lepidotteri Ropaloceri. È stata utilizzata una metodologia di raccolta di tipo quantitativo che ha permesso di ottenere dati sia sulla fauna sia sulle comunità. I rilievi sono stati compiuti su superfici di estensione nota. È stato possibile riconoscere delle comunità tipo in base alla composizione quantitativa separando gli ambienti aperti da quelli chiusi in ognuna delle tre differenti fasce vegetazionali (bioma delle sclerofille, fascia sannitica e fascia subatlantica). La comunità dell'Altipiano Silano ospita popolazioni di specie tipiche dell'orizzonte mediterraneo in virtù della sua continentalità climatica che aumenta le temperature estive. In dettaglio, sono state rilevate 94 specie e 2.401 individui. Di notevole interesse è la presenza di Melitaea aetherie (Hübner, 1826) per la quale la Sila Greca è l'unica stazione continentale italiana. Inoltre, viene spostato verso sud il limite della distribuzione continentale di Sloperia proto (Ochsenheimer, 1808), Polyommatus daphnis ([Denis & Schiffermüller], 1775) e Hipparchia hermione (Linnaeus, 1764) finora rinvenute fino al Massiccio del Pollino. L'analisi corologica mostra un impoverimento nella fauna della Sila Greca di elementi a distribuzione europea, se confrontata con la fauna dell'Appennino Lucchese (Marini & Trentini, 1986), anche per le sole stazioni montane. Procedendo verso sud non sembra esistere un effetto penisola per questo taxon in quanto la Sila Greca ha dimostrato di essere ricca di specie per lo meno come il comprensorio toscano già ricordato.

Abstract - Butterflies of Sila Greca (Southern Italy) (Lepidoptera Hesperioidea e Papilionoidea). A research was conducted on the butterfly communities of 44 observation spots in the Sila Greca Massif. A quantitative collecting method was used that allowed to study both communities and fauna. Data were gathered from areas with known width. It has been possible to identify some tipical communities and separate open lands from woodlands in each vegetation belt (biome of sclerophylls, samnitic belt and subatlantic belt). In the fauna of Sila Highland reside some populations of typically Mediterranean species because of its continental climate that increase summer temperatures. 94 species and 2401 specimens were found. Particularly interesting is the occurrence of Melitaea aetherie (Hübner, 1826) wich was found only here in continental Italy. Furthermore, continental distribution of Sloperia proto (Ochsenheimer, 1808), Polyommatus daphnis ([Denis & Schiffermüller], 1775) and Hipparchia hermione (Linnaeus, 1764) has been southward enlarged. Chorological analysis shows that species occurring in Sila Greca which are spread over Europe are fewer than in Appennino Lucchese (Marini & Trentini, 1986); this is true even at high altitudes. Southward, it seems not existing the peninsula effect in butterfly fauna; in fact, Sila Greca have a butterfly diversity higher, or at least similar, than Appennino Lucchese.

Key words: butterfly, Calabria, community

^{*} Lavoro parzialmente finanziato dal M.U.R.S.T. (fondi 40%) svolto nell'ambito del Programma di ricerca *Aspetti descrittivi e metodologici della biodiversità animale in Italia*. Coordinatore: prof. Emilio Balletto. Responsabile scientifico: prof. Pietro Brandmayr.

SCALERCIO SCALERCIO

Introduzione e scopo della ricerca

La fauna italiana dei lepidotteri diurni, che ammonta a 275 specie, sembra essere piuttosto esaurientemente nota, anche se secondo Balletto & Cassulo (1995) ne resterebbero da scoprire circa il 5%. D'altra parte le conoscenze sull'ecologia delle comunità dei ropaloceri sono piuttosto scarse. Notizie di carattere autoecologico si possono trovare su molti testi (Verity, 1940-1953), ma studi sinecologici sono stati effettuati solo da Bigot (1957) per la Sicilia, da Zangheri (1961, 1965) per il Monte Terminillo e la Foresta di Campigna, da Milani-Cristofolini (1963) per il Monte Baldo e da Balletto et al. (1977, 1982a, 1982b, 1982c, 1982d, 1983, 1988, 1989) per i consorzi erbacei alto appenninici ed alpini, per i litorali a duna dell'Italia meridionale, per alcuni ambienti relitti della Padania, per le Dolomiti e per il litorale tirrenico. Solo questi ultimi autori, però, hanno cercato di puntualizzare i rapporti funzionali di tipo trofico esistenti a livello di comunità.

In Europa, invece, gli studi di tipo biocenotico sono relativamente più diffusi (CLEU, 1945, 1947, 1950, 1951, 1953, 1957 per la Francia meridionale; BIGOT, 1952, 1956, 1957, 1958 per le isole tirreniche e la Provenza; Rézbanyai, 1974 e Uherkovich, 1973, 1975, 1976 per l'Ungheria; Gonseth, 1994a, 1994b per la Svizzera; Miralles & Stefanescu, 1994 per la Spagna). Inoltre molti lavori ecologici sono stati effettuati da altri autori, soprattutto inglesi, su singole specie (Warrington & Brayford, 1995) o su singoli fattori ecologici (Dover, 1989; Loertscher et al., 1995).

Lo scopo di questa ricerca è di contribuire a colmare le lacune ancora presenti nella faunistica e nell'ecologia dei ropaloceri in Calabria.

Cronologia degli studi faunistici

I dati sulla ropalocerofauna calabrese sono frammentari e permettono di raggiungere un grado di conoscenza appena sufficiente. Molti lavori sono ormai obsoleti e riportano dati da confermare, gli altri si limitano ad uno studio limitato nello spazio o nel tempo. Tutti i lavori disponibili sono stati portati a termine da studiosi di altre regioni o da stranieri i quali quasi sempre hanno fatto coincidere ricerche e vacanze estive; in estate, però, l'attività dei ropaloceri si concentra soprattutto ad alta quota a causa dell'aridità del clima. La conseguenza di ciò è che le aree di pianura o di bassa collina sono rimaste praticamente sconosciute, così come la distribuzione delle specie primaverili ed autunnali.

Il primo autore che riporta dei dati sui ropaloceri calabresi è Petagna (1787) che segnala 14 specie per la Calabria Ulteriore. Successivamente Costa O. G. (1832/36) segnala 50 specie, ma indicando come località di raccolta quasi eclusivamente il Regno di Napoli. Fra le specie segnalate almeno genericamente per la Calabria 12 risultano non segnalate da Petagna. Ancora nell'800 sono da segnalare i lavori di Costa A. (1863, 1882) relativi a Calabria Ulteriore e massiccio della Sila, e di Curò (1874/1880). I dati relativi alla Sila restano, fino al 1911, gli unici la cui località di raccolta è piuttosto ben individuata. È, infatti, Turati (1911) che in quell'anno riferisce della cattura di tre specie in Aspromonte e nei dintorni di Paola. Fino al 1920 vengono riportate in letteratura altre 21 specie nuove per la fauna calabrese come sporadiche segnalazioni di diversi autori, fra i

quali spicca Stauder (1914/1915) che raccoglie per la prima volta sulla Catena Costiera segnalando 36 specie. Stauder tornerà a più riprese nella regione approfondendo le ricerche in altre aree (1915/1916, 1917, 1921, 1922, 1923/1924, 1925, 1928). Nel 1920/1921 Querci pubblica il rinvenimento di 68 specie, tutte raccolte nei dintorni di San Fili (CS). Fino al 1940, data in cui Mariani pubblica la "Fauna Lepidopterorum Italiae", non vengono riportate che isolate catture. In questo momento le specie note per la fauna calabrese ammontano a 102.

Dal dopoguerra ad oggi le ricerche in Calabria hanno subito un notevole decremento. Fra le segnalazioni sporadiche e puntiformi spiccano per il loro interesse i lavori di Zangheri (1963), che formula delle "Considerazioni sulla fauna Lepidotterologica dei Massicci montani della Calabria", e di Gallo & Della Bruna (1974, 1977), che per primi cominciano l'esplorazione dei monti del Massiccio del Pollino. Nel 1977 questo massiccio montuoso è interessato anche dalle ricerche di Balletto e collaboratori che hanno studiato le comunità dei consorzi erbacei dell'intero appennino e che riportano diverse specie per il territorio calabrese. Balletto & Toso nel 1979 descrivono quella che presumibilmente è una delle ultime specie di ropaloceri della fauna italiana la cui esistenza non era ancora nota, Polyommatus galloi Balletto & Toso, 1979, endemico del Parco nazionale del Pollino. Complessivamente l'inizio dell'esplorazione del Pollino ha arricchito la fauna calabrese di altre 13 specie. Parenzan (1980) segnala per l'Aspromonte quattro specie mai raccolte in Calabria. Per concludere, altre tre specie vengono aggiunte alla fauna calabrese da Brandmayr & Scalercio (1996), Pellecchia & Pizzetti (1998) e Pellecchia (1999).

Fino ad ora risultano note per la fauna calabrese 126 specie, ma diverse sono le aree ancora da esplorare.

Un'analisi dell'incremento del numero di specie appartenenti alla fauna calabrese, dalla pubblicazione del *Systema Naturae* di Linneo (1758) ad oggi, pone in rilievo come esso sia stato costante ed abbia proceduto per gradini ognuno dei quali è corrisposto all'esplorazione di aree ancora vergini (fig. 1).

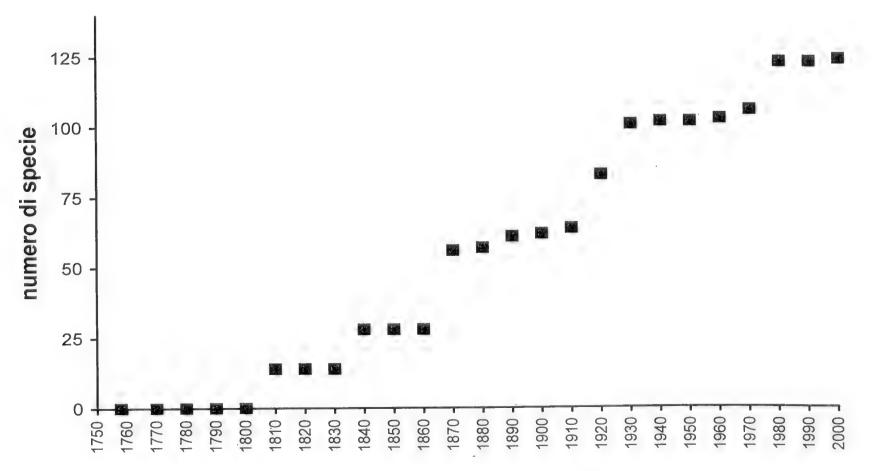


Fig. 1. Incremento del numero di specie della fauna calabrese dal 1758 ad oggi. I dati sono raggruppati per decadi.

Area di studio

L'Altopiano Silano occupa la parte centrale della Calabria ed ha una altezza media di 1000 m, con un picco di 1929 m (Monte Botte Donato). Esso può essere diviso in tre aree che, da nord a sud, sono la Sila Greca, la Sila Grande e la Sila Piccola. La Sila Greca occupa il versante ionico del massiccio silano cosentino, avendo come confini naturali il torrente Cino a nord-ovest e il fiume Nicà a sud-est. A nord è delimitata dal Mar Ionio e a sud il confine con la Sila Grande è segnato da una serie di rilievi quali il Monte Altare (m 1653) e il Monte Paleparto (m 1480). I nostri studi hanno interessato in modo particolare il bacino del fiume Trionto e i territori limitrofi. Il fiume Trionto si origina dalle aree più elevate della Sila Greca, in località Piano del Barone, scende poi verso valle attraversando i territori comunali di Acri, Longobucco, Cropalati, Caloveto, Calopezzati, Crosia e Rossano per sfociare nel mare Jonio dopo aver dato origine alla più grande fiumara della provincia di Cosenza.

GEOLOGIA. La Sila Greca è caratterizzata da una complicata alternanza di litotipi diversi e procedendo dall'interno verso il mare affiorano i complessi man mano più recenti. Il primo, quello più antico ed esteso, forma la parte interna dell'area studiata ed è costituito da rocce ignee intrusive acide (graniti) e metamorfiche (gneiss, filladi, ecc.). Il secondo complesso, trasgressivo sul primo, è composto in prevalenza da rocce calcaree (serie di Longobucco), costituenti la copertura mesozoico-terziaria dello zoccolo calabrese. Il terzo complesso è costituito da rocce sedimentarie (arenarie, marne, argille, ecc.) la cui deposizione risale ad un periodo che va dall'Oligocene al Pliocene. Il quarto complesso infine è composto dai depositi alluvionali di origine quaternaria.

In base a ciò il territorio della Sila Greca può essere suddiviso in tre zone a morfologia diversa (Panizza, 1966):

- 1. la regione più a monte fa parte dei contrafforti periferici del massiccio silano ed è caratterizzata da un paesaggio aspro con incisioni vallive profonde e versanti rocciosi ripidi;
- 2.la zona compresa fra la precedente e la fascia litorale è costituita da un insieme di dossi e di colline, attraversate da larghi letti di fiumara. Il paesaggio, in prevalenza dolcemente ondulato e con larghe vallate, è a volte interrotto da allineamenti di scarpate rocciose e da tipiche formazioni dette "cuestas". In questa zona l'erosione è areolare, mentre in quella più a monte è essenzialmente lineare;
- 3.la fascia di pianura litoranea che limita il territorio verso il mare è modellata prevalentemente da fattori azonali (corsi d'acqua, mare ecc.); l'azione di deflazione eolica è ostacolata dalla sia pur scarsa vegetazione.

Nel territorio studiato, ma solo a quote basse e medie, il ruscellamento su versanti a ripido pendio e privi di vegetazione origina, per esagerato approfondimento dei rivoli, una tipica morfologia a calanchi formata da un insieme di solchi ramificati e separati da creste a forma di lama. Nella zona troviamo anche lo stadio finale dell'evoluzione di un rilievo a calanchi, rappresentato da piccoli dossi parzialmente incisi da solchi di erosione superficiale, le cosiddette argille a "dorso d'elefante".

CLIMA. La Sila Greca rientra nella fascia dei climi temperati. L'orografia tormentata e

l'azione dei mari sono senza dubbio i principali fattori che ne determinano le condizioni climatiche. Accanto a questi l'esposizione e la posizione geografica delle varie località, soprattutto in relazione alla natura dei venti predominanti, esercitano una notevole influenza sulle condizioni estreme. L'esame dei dati termopluviometrici forniti dalle stazioni meteorologiche presenti sul territorio consente di evidenziare che tutto il territorio è caratterizzato dallo stesso tipo di clima, con variazioni legate all'altitudine. Infatti, nelle zone litoranee il clima è tipicamente mediterraneo (eumediterraneo), cioè con inverni miti ed estati calde e siccitose. Nelle zone interne ed al di sopra dei 700-800 metri si passa ad un clima mediterraneo-montano, con inverni sempre più freddi e piovosi ed estati meno calde e con qualche precipitazione. Nell'area si registra un periodo arido molto ampio: giugno-agosto per quelle più in quota, maggio-settembre o aprile-settembre per quelle più in basso.

VEGETAZIONE. La variazione della durata del periodo arido con l'altitudine contribuisce in maniera determinante alla zonazione altitudinale della vegetazione. Bernardo et al. (1991) individuano nel paesaggio della Sila Greca tre fasce vegetazionali all'interno delle quali discriminano fra le formazioni boschive e quelle erbacee. Essi schematizzano la zonazione altitudinale individuando un Piano basale, che si estende da 0 a 600 m di quota, un Piano collinare (600-1100 m di quota) e un Piano montano (sopra i 1100 m), specificando che questi limiti altitudinali sono soltanto indicativi dal momento che la complicata geomorfologia dell'area può dare origine ad una distribuzione extrazonale della vegetazione. Questi piani corrispondono rispettivamente al bioma delle sclerofille ed a quello delle caducifoglie temperate (eliofile nel Piano collinare corrispondente alla Fascia Sannitica, sciafile nel Piano montano corrispondente alla Fascia Subatlantica).

Nel bioma delle sclerofille l'influenza dell'uomo è molto evidente essendovi diversi centri urbani ed estese aree coltivate ad olivo, agrumi e cereali. Le rare formazioni boschive naturali sono formate dal leccio (Quercus ilex L.) con frammiste molte specie stenomediterranee. A testimonianza del forte impatto antropico che tende a ringiovanire il bosco, lo strato arboreo non supera mai la decina di metri e quello arbustivo raggiunge elevati valori di copertura. La macchia bassa di origine secondaria, in rapporti dinamici con le leccete, è formata da suffrutici, alberi e cespugli di Calicotome villosa (Poiret) Link, Phillyrea latifolia L., Asparagus acutifolius L., Cistus monspeliensis L. e Cistus incanus L. ai quali, dove il degrado è minore, si possono aggiungere plantule di Rhamnus alaternus L., Erica arborea L., Pistacia lentiscus L. e Quercus ilex L. Questa macchia non supera i 2-3 m di altezza e diventa sempre più rada dove i pendii si addolciscono, cedendo il passo a pascoli. Sui greti delle fiumare si sviluppa una boscaglia, dominata da Nerium oleander L. e alcune specie di Tamarix. Una buona parte della superficie del bioma delle sclerofille è andata soggetta a rimboschimenti ad *Eucalyptus* camaldulensis Dehnh. che, ombreggiando poco il suolo, nel suo sottobosco ospita una fitocenosi simile a quella delle formazioni erbacee circostanti. Le formazioni erbacee, presenti soprattutto a quote basse, sono formate principalmente da pascoli in cui dominano Hedysarum coronarium L. e Cynara cardunculus L.; quest'ultima entità prevale dove il pascolo si fa più intenso. La natura argillosa del substrato favorisce la presenza di specie perenni, rappresentate da molte geofite con fioritura primaverile. Sulle argille

SCALERCIO SCALERCIO

che danno luogo a fenomeni calanchivi si sviluppa una steppa a *Lygeum spartum* L. e *Cymbopogon hirtus* (L.) Janchen simile alla vegetazione steppica dell'Africa settentrionale. Sui greti dei fiumi ed in corrispondenza delle loro foci cresce una gariga caratteristica per l'abbondanza di *Helichrysum italicum* (Roth) Don., *Artemisia variabilis* Ten. e *Teucrium polium* L. alle quali si associano varie specie xerofile. La linea di costa, molto degradata, si caratterizza per la presenza di una vegetazione psammofila pioniera.

L'estesa superficie boscata del bioma delle caducifoglie (fascia sannitica) è molto degradata sia per il sistematico prelievo di legname che per la pratica del pascolo nel sottobosco. Le formazioni a latifoglie sono rappresentate prevalentemente da quercete decidue a Quercus virgiliana (Ten.) Ten. e Q. cerris L., alle quali in particolari condizioni edafiche e topoclimatiche si può associare Q. ilex L. Questi boschi differiscono da quelli degli altri piani per la presenza di specie che indicano il carattere mediterraneo di queste formazioni, la loro identità floristica e la presenza di un substrato acido. Ad una fisionomia piuttosto omogenea di questi boschi corrisponde una differenza floristica piuttosto forte che porta all'individuazione di cinque tipologie di bosco differenti: Bosco a Quercus virgiliana (Ten.) Ten. e Acer monspessulanum L., a diretto contatto con le leccete; Bosco a Quercus cerris L.; Bosco a Quercus cerris L. e Quercus virgiliana (Ten.) Ten., variante termofila del precedente; Bosco a Quercus cerris L. e Ostrya carpinifolia Scop.; Bosco a Quercus frainetto Ten., caratterizzato dalla ricchezza di specie mediterranee e dall'abbondanza di Erica arborea L. Residui di antichi castagneti da frutto (Castanea sativa Mill.) sono abbastanza diffusi nella fascia propria del cerro. L'abbandono delle attività agro-pastorali ha portato vaste superfici della fascia sannitica ad essere invase da arbusteti nei quali le specie dominanti sono Spartium junceum L., Crataegus monogyna Jacq., Prunus spinosa L., Rosa sp. e Rubus sp. alle quali si associa nelle aree più degradate Pteridium aquilinum (L.) Kuhn. Le formazioni erbacee sono prevalentemente pascoli instaurati su substrati arenaceo-marnosi o calcareo-marnosi in cui sono abbondanti le terofite. La tessitura fine del substrato favorisce le specie perenni, quella argillosa favorisce lo sviluppo di praterie simili a quelle dei dossi argillosi del bioma delle sclerofille.

Le formazioni boschive rinvenibili nella fascia subatlantica sono due. La prima è caratterizzata dalla presenza del faggio (Fagus sylvatica L.), la seconda, sviluppantesi solo su substrato sabbioso derivante dalla disgregazione dei graniti, si caratterizza per la presenza di Pinus laricio Poiret al quale nelle schiarite si sostituiscono Astragalus calabrus (Ten.) Fiori e Chamaecytisus spinescens (Presl.) Rothm. Le formazioni erbacee sono costituite da pascoli e prati xerici su substrato sabbioso che ospitano in netta maggioranza piante perenni. Esse si caratterizzano per la presenza di una comunità a Potentilla calabra Ten. e Armeria canescens (Host) Bois alle quali si affiancano specie tipiche dei suoli acidi sabbiosi. Non legate ad alcuna zonazione altitudinale sono le formazioni boschive ripariali costituite da Alnus glutinosa (L.) Gaertner, Populus nigra L. e Salix spp. Limitata al bioma delle caducifoglie è invece Alnus cordata (Loisel) Desf. che si comporta da pioniera su substrati a forte erosione e ad inclinazione elevata.

Punti di osservazione. I criteri adottati per la scelta dei punti di osservazione sono i seguenti: massima rappresentatività dei differenti biotopi; massima omogeneità al loro

interno; relativa facilità di accesso; minima possibilità di un qualche effetto bordo.

Ne sono stati scelti 44 (fig. 2) che sono descritti di seguito e ordinati secondo l'altitudine crescente. Per ognuno di essi si fornisce la quota, l'esposizione, l'inclinazione, la superficie, il substrato, una sommaria descrizione e la localizzazione.

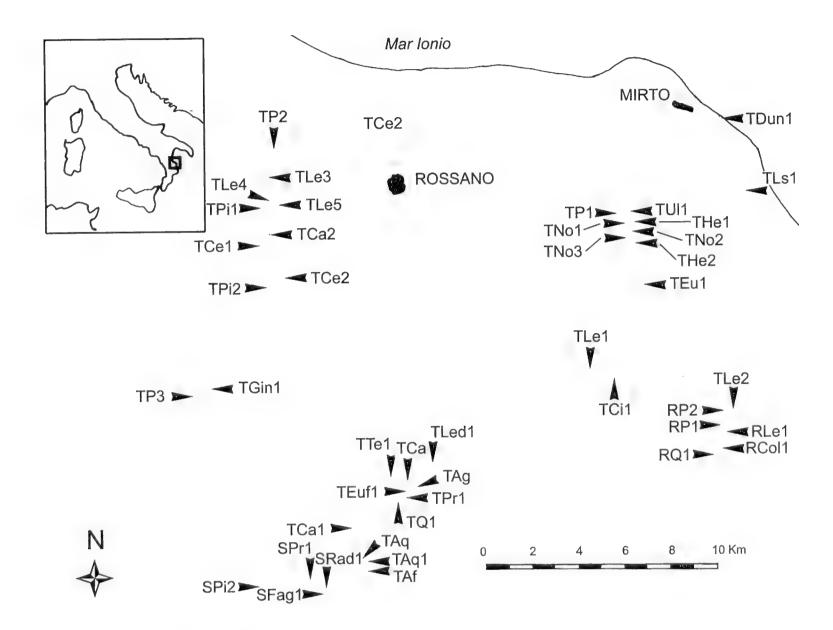


Fig. 2. Individuazione della Sila Greca e posizionamento dei punti di osservazione.

Tdun1 Quota: 3 m slm; Esp.: -; Incl.: 0°; Sup.: 3000 m²; Substr.: Sabbie oloceniche. Formazione retrodunale con sporadici esemplari di *Ephedra distachya* L. Copertura erbacea 25-30%. Località Macchia della Bura, Crosia (CS).

TLs1 Quota: 40 m slm; Esp.: WNW; Incl.: 6°; Sup.: 950 m²; Substr.: Argille siltose plioceniche. Steppa a *Lygeum spartum* L. poco pascolata e ciclicamente arata. Copertura erbacea dell'80%. Località Garrubella, Calopezzati (CS).

TUI1 Quota: 65 m slm; Esp.: -; Incl.: 0°; Sup.: 2000 m²; Substr.: Alluvioni oloceniche di riporto. Uliveto dissodato con sporadici cespugli di *Rubus* sp. e *Prasium majus* L. A sud di località Strange, Calopezzati (CS).

THe1 Quota: 75 m slm; Esp.: N; Incl.: 5°; Sup.: 1500 m²; Substr.: Ghiaie ed arenarie oloceniche. Golena ad *Helicrysum italicum* (Roth) Don. con ridotto strato erbaceo. Greto della Fiumara Trionto, Calopezzati (CS).

TNo1 Quota: 75 m slm; Esp.: -; Incl.: 0°; Sup.: 350 m²; Substr.: Arenarie e limi oloce-

nici. Bosco alveale a *Tamarix africana* Poiret e *Nerium oleander* L. Copertura arbustiva del 60%. Greto della Fiumara Trionto, Calopezzati (CS).

TNo2 Quota: 80 m slm; Esp.: -; Incl.: 0°; Sup.: 200 m²; Substr.: Arenarie e limi olocenici. Bosco alveale a *Tamarix africana* Poiret e *Nerium oleander* L. Copertura arbustiva del 75%. Greto della Fiumara Trionto, Calopezzati (CS).

TNo3 Quota: 90 m slm; Esp.: -; Incl.: 0°; Sup.: 300 m²; Substr.: Arenarie e limi olocenici. Boschetti alveali a *Tamarix africana* Poiret e *Nerium oleander* L. Copertura arbustiva del 90%. Greto della Fiumara Trionto, Calopezzati (CS).

THe2 Quota: 90 m slm; Esp.: N; Incl.: 5°; Sup.: 200 m²; Substr.: Ghiaie ed arenarie oloceniche. Golena poco stabilizzata ad *Helicrysum italicum* (Roth) Don. con copertura erbacea nulla. Greto della Fiumara Trionto, Calopezzati (CS).

TP1 Quota: 100 m slm; Esp.: E; Incl.: 17°; Sup.: 1300 m²; Substr.: Argille marnose mioceniche. Pascolo dominato da *Cynara cardunculus* L. Appena a sud di località Strange, Calopezzati (CS).

TEu1 Quota: 160 m slm; Esp.: W; Incl.: 13°; Sup.: 1000 m²; Substr.: Argille marnose mioceniche. Rimboschimento ad *Eucalyptus camaldulensis* Dehnh. con copertura del 60%. Lo strato erbaceo sembra una versione impoverita di quello del pascolo. Località Sferra Cavallo, Caloveto (CS).

TLe1 Quota: 180 m slm; Esp.: NE; Incl.: 43°; Sup.: 400 m²; Substr.: Scisti filladici paleozoici. Bosco a sclerofille sempreverdi dominato da *Quercus ilex* L. e *Arbutus unedo* L. con portamento arbustivo e copertura del 90%. La trasparenza orizzontale rasenta lo zero. Località Cozzo Dragonara, Caloveto (CS).

TP2 Quota: 215 m slm; Esp.: ENE; Incl.: 10°; Sup.: 1000 m²; Substr.: Argille siltose plioceniche. Pascolo caratterizzato da *Cynara cardunculus* L. Copertura erbacea 90%. Località Lampa Patire, Rossano (CS).

RP2 Quota: 340 m slm; Esp.: -; Incl.: 0°; Sup.: 2500 m²; Substr.: Alluvioni oloceniche. Pascolo intensamente sfruttato con abbondanza di *Onopordon illyricum* L. Località Vallone del Gardo, Pietrapaola (CS).

TLe2 Quota: 350 m slm; Esp.: NW; Incl.: 38°; Sup.: 400 m²; Substr.: Scisti filladici paleozoici. Bosco a sclerofille sempreverdi dal portamento arbustivo e con copertura del 90%. Località Vallone del Gardo, Pietrapaola (CS).

RP1 Quota: 360 m slm; Esp.: WNW; Incl.: 7°; Sup.: 1200 m²; Substr.: Scisti filladici paleozoici. Pascolo con plantule di *Quercus* spp. Lo strato erbaceo è dominato da *Bromus hordeaceus* L. Località Villari, Pietrapaola (CS).

RLe1 Quota: 365 m slm; Esp.: WNW; Incl.: 35°; Sup.: 350 m²; Substr.: Scisti filladici paleozoici. Macchia secondaria ad *Erica arborea* L., *Arbutus unedo* L. e *Quercus ilex* L. Località Villari, Pietrapaola (CS).

RCol1 Quota: 380 m slm; Esp.: NW; Incl.: 3°; Sup.: 2000 m²; Substr.: Alluvioni oloceniche. Prato sfalciabile a *Medicago sativa* L. Località Torre Macchia Parisi, Pietrapaola (CS).

RQ1 Quota: 400 m slm; Esp.: WNW; Incl.: 20°; Sup.: 600 m²; Substr.: Scisti filladici paleozoici. Sterrata in un bosco misto a *Quercus cerris* L. e *Q. frainetto* Ten., invasa da *Rubus* sp. Località Torre Macchia Parisi, Pietrapaola (CS).

TLe3 Quota: 400 m slm; Esp.: ENE; Incl.: 35°; Sup.: 300 m²; Substr.: Graniti e gra-

nodioriti paleozoici. Radura in una macchia a *Quercus ilex* L., *Arbutus unedo* L. ed *Erica arborea* L. Località Gurgulia, Rossano (CS).

TTe Quota: 470 m slm; Esp.: E; Incl.: 3°; Sup.: 850 m²; Substr.: Alluvioni oloceniche. Pascolo golenale dominato da *Euphorbia helioscopia* L. e *Lagurus ovatus* L. Località Filigieno, sul greto del Trionto, Longobucco (CS).

TCi1 Quota: 530 m slm; Esp.: SSE; Incl.: 15-20°; Sup.: 800 m²; Substr.: Arenarie mioceniche. Macchia a *Cistus* spp. con poche plantule di *Quercus virgiliana* (Ten.) Ten. Copre per il 95%. Vetta del Monte Colonina, Caloveto (CS).

TLed Quota: 540 m slm; Esp.: S; Incl.: 33°; Sup.: 700 m²; Substr.: Calcari marnosi ed arenacei giurassici. Bosco ceduo a *Quercus ilex* L. con copertura del 30%. Località Pietracutale, Longobucco (CS).

TCa Quota: 550 m slm; Esp.: N; Incl.: 20°; Sup.: 350 m²; Substr.: Calcari marnosi ed arenacei giurassici. Bosco di esemplari maturi di *Castanea sativa* Mill. che coprono per il 65%. Località Vallone dei Ronzi, Longobucco (CS).

TAg Quota: 560 m slm; Esp.: NNE; Incl.: 15°; Sup.: 500 m²; Substr.: Conglomerati alluvionali pleistocenici. Bosco ripariale ad *Alnus glutinosa* (L.) Gaertner. Località Vallone dei Ronzi, Longobucco (CS).

TEuf1 Quota: 565 m slm; Esp.: ESE; Incl.: 44°; Sup.: 400²; Substr.: Calcari marnosi ed arenacei giurassici. Prato sassoso in cui domina *Euphorbia helioscopia* L. Località Vallone dei Ronzi, Longobucco (CS).

TPr1 Quota: 570 m slm; Esp.: -; Incl.: 0°; Sup.: 350 m²; Substr.: Calcari marnosi ed arenacei giurassici. Prato pascolato con piccole piante di *Rubus* sp. Località Vallone dei Ronzi, Longobucco (CS).

TQ1 Quota: 570 m slm; Esp.: ENE; Incl.: 23°; Sup.: 300 m²; Substr.: Calcari marnosi ed arenacei giurassici. Bosco a *Quercus pubescens* Willd. le cui piante coprono per 1'80%. Località Vallone dei Ronzi, Longobucco (CS).

TLe4 Quota: 580 m slm; Esp.: SE; Incl.: 25°; Sup.: 300 m²; Substr.: Graniti e granodioriti paleozoici. Bosco piuttosto maturo di *Quercus ilex* L. che supera i 10 metri e copre per il 75%. Località Santi Padri, Rossano (CS).

TLe5 Quota: 580 m slm; Esp.: NW; Incl.: 25°; Sup.: 350 m²; Substr.: Graniti e granodioriti paleozoici. Lecceta ceduata con isolati arbusti di *Cistus* spp. e *Calicotome villosa* (Poiret) Link. Località Santi Padri, Rossano (CS).

TPi1 Quota: 590 m slm; Esp.: NE; Incl.: 8°; Sup.: 200 m²; Substr.: Graniti e granodioriti paleozoici. Giovane pineta di rimboschimento insediata su un substrato privo di suolo che copre per il 65%. Località Santi Padri, Rossano (CS).

TCe1 Quota: 820 m slm; Esp.: WNW; Incl.: 18°; Sup.: 1000 m²; Substr.: Graniti e granodioriti paleozoici. Bosco a *Quercus cerris* L. che supera i 15 metri di altezza ed offre 1'80% di copertura. Località Campi, Rossano (CS).

TCa2 Quota: 850 m slm; Esp.: NW; Incl.: 7°; Sup.: 750 m²; Substr.: Graniti e granodioriti paleozoici. Castagneto maturo con discontinuità nella copertura. I castagni raggiungono i 10 m di altezza. Località Campi, Rossano (CS).

TCa1 Quota: 890 m slm; Esp.: ESE; Incl.: 18°; Sup.: 300 m²; Substr.: Graniti e granodioriti paleozoici. Castagneto ceduo che offre una copertura del 90 %. Appena fuori del paese di Longobucco (CS), sulla strada per la Fossiata.

TPi2 Quota: 1005 m slm; Esp.: NNE; Incl.: 20°; Sup.: 850 m² Substr.: Scisti cornubianitici paleozoici. Bosco giovane a *Pinus laricio* Poiret con bassa copertura arborea (35%). Versante Nord di Cozzo del Pesco, Rossano (CS).

TCe2 Quota: 1090 m slm; Esp.: ENE; Incl.: 30°; Sup.: 350 m²; Substr.: Scisti cornubianitici paleozoici. Cerreta d'alto fusto che supera i 18 metri di altezza e copre per il 75%. Località Col di Vura, Rossano (CS).

TP3 Quota: 1100 m slm; Esp.: -; Incl.: 0°; Sup.: 2500 m²; Substr.: Graniti e granodioriti paleozoici. Coltivo abbandonato. Lo strato erbaceo copre appena per il 60%. Presso località Angaro, Longobucco (CS).

TAq Quota: 1150 m slm; Esp.: W; Incl.: 42°; Sup.: 250 m²; Substr.: Granodioriti e graniti paleozoici. Fitto boschetto di *Ilex aquifolium* L. con sporadiche plantule di *Pinus laricio* Poiret. Località Macrocioli, Longobucco (CS).

TAq1 Quota: 1150 m slm; Esp.: W; Incl.: 42°; Sup.: 250 m²; Substr.: Granodioriti e graniti paleozoici. Radura in un bosco di *Ilex aquifolium* L. causata da una colata di detrito. Località Macrocioli, Longobucco (CS).

TAf Quota: 1165 m slm; Esp.: N; Incl.: 35°; Sup.: 200 m²; Substr.: Granodioriti e graniti paleozoici. Bosco a *Fagus sylvatica* L. che copre per il 60%. Le piante raggiungono i 20 m di altezza. Località Macrocioli, Longobucco (CS).

TGin1 Quota: 1270 m slm; Esp.: SW; Incl.: 13°; Sup.: 600 m²; Substr.: Graniti e granodioriti paleozoici. Macchia a ginestra dominante con *Pyrus communis* L. Versante Sud di Serra Castagna, Longobucco (CS).

SPr1 Quota: 1550 m slm; Esp.: WNW; Incl.: 7°; Sup.: 600 m²; Substr.: Graniti e granodioriti paleozoici. Prato fortemente perturbato dal pascolo di bovini. Versante Ovest di Cozzo Pupatolo, Longobucco (CS).

SPi2 Quota: 1570 m slm; Esp.: -; Incl.: 0°; Sup.: 900 m²; Substr.: Graniti e granodioriti paleozoici. Pineta alta fino a 20 metri. Lo strato erbaceo è quello di un tipico prato montano. Presso la cantoniera Gallopane, Longobucco (CS).

Srad1 Quota: 1630 m slm; Esp.: NE; Incl.: 5°; Sup.: 800 m²; Substr.: Graniti e granodioriti paleozoici. Radura di faggeta con cespugli di *Prunus* sp. Debolmente pascolata. Località Colle dell'Esca, Longobucco (CS).

SFag1 Quota: 1635 m slm; Esp.: SW; Incl.: 25°; Sup.: 600 m²; Substr.: Graniti e granodioriti paleozoici. Sentiero in faggeta mista con pini che raggiune i 7 m e copre per 1'80%. Località Colle dell'Esca, Longobucco (CS).

La distribuzione sul territorio di queste stazioni segue sostanzialmente due transetti, quello della valle del Trionto (24 punti di osservazione), e quello del crinale del Patire (11 punti di osservazione), interessando sia ambienti vallivi che di crinale. Altri 9 punti di osservazione sono stati scelti in modo da coprire i biotopi che non erano rappresentati né in un transetto né nell'altro. Il minor numero di punti di osservazione censiti lungo la direttrice del Patire è giustificato dalla sua maggiore uniformità vegetazionale e geomorfologica. La distribuzione altimetrica dei siti di campionamento è stata proporzionata il più possibile con la quantità di superficie del territorio presente alle differenti quote.

METODI

Per la raccolta dei dati è stata scelta una metodologia quantitativa in quanto, oltre a non essere incompatibile con analisi esclusivamente qualitative, offre la possibilità di studiare più nel dettaglio le diverse situazioni che si presentano di volta in volta. D'altra parte, però, è necessario un maggiore sforzo di campionamento e una più attenta analisi dei dati. Balletto et al. (1977) mettono in evidenza come una metodica qualitativa dia uguale peso statistico a tutte le specie, sia rinvenute con popolazioni abbondanti che in un unico individuo, limitando così la portata delle conclusioni, ma eludendo la possibilità di incorrere in molte sorgenti di errore (piccole differenze di quota, di esposizione o del periodo di campionamento, concentrazione di individui intorno alle fonti alimentari ecc.).

È stato scelto il metodo dei quadrati, che consiste nel contare a vista il numero di individui presenti per ogni specie su una superficie di estensione nota, perché permette di raccogliere molti dati in poco tempo. Purtroppo, però, abbiamo dovuto apportare delle modifiche sostanziali: è stata ridotta la superficie da censire che da un minimo di un ettaro, previsto per diluire probabili discontinuità nei popolamenti, nel nostro caso passa ad un massimo di 3.000 m². Questa necessità è scaturita da una parte per la scarsa facilità di censimento su una così vasta superficie, dall'altra per la difficoltà nel reperire biotopi sufficientemente ampi ed omogenei al loro interno. Infatti le trasformazioni di origine antropica hanno interessato in maniera più o meno spinta tutto il paesaggio spezzettandolo in tante tessere che vanno a comporre un mosaico molto intricato nel quale, in alcuni casi, diventa difficile discriminare le differenti comunità, certamente legate da rapporti dinamici. La bontà del metodo, però non viene inficiata in quanto i dati raccolti nelle stazioni prescelte sono influenzati solo parzialmente dalla limitata superficie (Scalercio, in stampa), e quindi, anche se i risultati finali possono risentire di approssimazioni, questo metodo può essere utilizzato per ottimizzare lo sforzo di campionamento.

I punti di osservazione sono stati campionati per un anno da marzo a novembre negli anni compresi fra il 1993 ed il 1998. Il campionamento ha avuto cadenza trisettimanale ed è stato condotto in stazioni di superficie nota principalmente in giornate serene e in un orario compreso fra le 09:30 e le 15:00. Le stazioni sono state percorse in modo da non ripassare due volte nello stesso punto ed in modo che non sfuggissero all'osservazione gli individui posati sulla vegetazione.

Per cercare di evitare le doppie conte e l'ingresso di altri individui nelle stazioni durante il campionamento si è proceduto dapprima alla valutazione della consistenza numerica delle specie più vagili poi delle altre, completando l'operazione il più rapidamente possibile (non meno di 5 minuti, non più di 25 minuti a seconda di quanto presente nella stazione) per ottenere come una istantanea del popolamento in Lepidotteri Ropaloceri. Gli individui e le specie rilevati solo ai margini della stazione (riportati nel successivo elenco con un c/o anteposto alla sigla della stazione) sono stati presi in considerazione solo per lo studio faunistico e non sono entrati a far parte di considerazioni quantitative.

I confronti quantitativi fra le comunità sono stati possibili utilizzando le abbondanze relative assunte dalle specie in quanto altrimenti non sarebbe stato possibile confrontare dati raccolti su aree di superficie differente.

SCALERCIO SCALERCIO

ELENCO DELLE SPECIE

Di seguito riportiamo un elenco di tutte le specie rinvenute, ordinate secondo la Checklist delle specie della fauna italiana (Balletto & Cassulo, 1995), per le quali sono riportati: corotipo secondo Parenzan (1994), categoria ecologica fondamentale e vagilità secondo Balletto et al. (1982a, 1982b) (le specie non riportate in questi lavori sono state caratterizzate da noi), periodo di volo e distribuzione altitudinale rilevati nella Sila Greca, piante alimentari larvali secondo Higgins & Riley (1980), presenza in Italia, Calabria e Sila Greca. Tra parentesi, dopo la sigla della stazione di riferimento, è riportato il numero di individui raccolto.

HESPERIIDAE

Pyrgus carthami (Hübner, [1819]) - CAE - Mesofila; 2; 16.VI.97; 1150; Potentilla, Althaea ecc.

ITALIA: Manca nelle Isole. CALABRIA: Nota solo per le aree montane della provincia di Cosenza.

SILA GRECA: TAq1 (2).

Pyrgus malvoides (Elwes & Edwards, 1897) - ESW - Mesofila; 2; V-VI, IX; 380/1270; Potentilla, Fragaria, Malva ecc.

ITALIA: Manca in Sardegna. CALABRIA: Nota solo per le aree montane della provincia di Cosenza.

SILA GRECA: TAq1 (5), RCol1 (1), c/o TCe1, c/o TGin1.

Pyrgus onopordi (Rambur, 1839) - ESW1 - Termofila; 2; VIII; 1550/1630; Potentilla ecc. Italia: Manca nelle Isole. Calabria: Molto sporadica sui principali rilievi. Sila Greca: SPr1 (1), Srad1 (1).

Spialia sertorius (Hoffmannsegg, 1804) - CEM - Mesofila; 2; V-VIII; 360/890; Sanguisorba, Rubus, Potentilla ecc.

ITALIA: Tutte le regioni. CALABRIA: Segnalata solo in provincia di Cosenza. SILA GRECA: TEuf1 (8), TPr1 (3), RP1 (2), RCol1 (1), TCa1 (1), c/o TCe1.

Carcharodus alceae (Esper, 1780) - CEM – Mesofila; 2; V-IX; 0/1550; Malva, Althaea, Hibiscus ecc.

ITALIA: Tutte le regioni. CALABRIA: Nota per località montane o pedemontane di tutta la regione. SILA GRECA: RP1 (2), TNo3 (1), TUl1 (1), TLe2 (1), TLed (1), TPr1 (1), TP3 (1), c/o RCol1, c/o TAq1.

Carcharodus flocciferus (Zeller, 1847) - MES - Mesofila; 2; VIII; 1630; Marrubium, Stachys

ITALIA: Quasi tutte le regioni. CALABRIA: Sporadica in località montane della provincia di Cosenza.

SILA GRECA: Srad1 (1).

Sloperia proto (Ochsenheimer, 1808) - MES - Termofila; 2; fine IX, inizio X; 40; *Phlomis*. ITALIA: Versante ionico delle regioni meridionali e Sicilia. CALABRIA: Civita (PARENZAN, 1975); Monte Moschereto (PARENZAN, com. pers.).

SILA GRECA: c/o TLs1.

Erynnis tages (Linnaeus, 1758) - ASE - Euritopa; 2; V-VI; 1570/1630; Lotus corniculatus L., Eryngium ecc.

ITALIA: Tutte le regioni continentali. CALABRIA: Tutti i rilievi montuosi.

SILA GRECA: Srad1 (2), SPi2 (1).

Thymelicus acteon (Rottenburg, 1775) - EUR3 mac - Termofila; 2; V-VII; 40/565; *Bromus* ITALIA: Manca in Sardegna. Localizzata al nord.

Calabria: Nota per i rilievi montuosi della provincia di Cosenza e per alcune località xeriche. Sila Greca: TLs1 (3), TEuf1 (3), TUl1 (1), TP2 (1).

Thymelicus flavus (Brünnich, 1763) - EUR3 - Termofila; 2; V-VII; 40/1270; Deschampia, Oeyzopsis, Holcus ecc.

ITALIA: Manca in Sardegna. CALABRIA: Nota per i rilievi montuosi della provincia di Cosenza.

SILA GRECA: TGin1 (11), TAg (11), TCa1 (10), TEuf1 (9), TLs1 (4), TLed (4), TCa (4), TP2 (3), TCa2 (3), TPr1 (2), TQ1 (2), TCe1 (2), TUl1 (1), RLe1 (1), c/o TTe,.

Thymelicus lineolus (Ochsenheimer, 1808) - OLA - Mesofila; 2; VI-VII; 340/1550; soprattutto graminacee

ITALIA: Manca in Sardegna. CALABRIA: Segnalata per i principali rilievi.

SILA GRECA: TAq1 (10), RP1 (1), RP2 (1), SPr1 (1), c/o TP3.

Hesperia comma (Linnaeus, 1758) - OLA - Termofila; 2; fine VIII; 1550-1630; graminacee e papilionacee

Italia: Manca in Sardegna. Calabria: Nota per il Massiccio del Pollino e per l'Altopiano Silano.

SILA GRECA: Srad1 (2), SPr1 (1).

Ochlodes venatus (Bremer & Grey, 1853) - ASE - Mesofila; 2; V, VII; 470/1550; diverse graminacee.

ITALIA: Manca in Sardegna. CALABRIA: Nota per i rilievi montuosi e per pochissime aree umide di collina.

SILA GRECA: TAq1 (2), TCa1 (1), c/o TTe.

Gegenes nostradamus (Fabricius, 1793) - INM - Xerofila; 3; 13.VIII.94; 100; diverse graminacee

ITALIA: Nelle aree costiere. Manca nelle regioni adriatiche ed in Sardegna.

CALABRIA: Monte Tinna verso San Luca (STAUDER, 1923/24).

SILA GRECA: c/o THe2.

Gegenes pumilio (Hoffmannsegg, 1804) - AIM - Xerofila; 3; VII-X; 0/565; diverse graminacee

ITALIA: Nelle aree costiere. Manca nelle regioni adriatiche ed in Sardegna.

Calabria: Conosciuta per aree xeriche del versante ionico e, molto più raramente, dell'interno.

SILA GRECA: Tdun1 (1), TTe (1), c/o TLs1, c/o TEu1.

PAPILIONIDAE

Papilio machaon Linnaeus, 1758 - PAL - Termofila; 4; III-VII, IX-X; 0/540; diverse ombrellifere

Italia: Tutte le regioni. Calabria: Comune in tutta la regione.

SILA GRECA: Rossano (PARENZAN, com. pers.), TCi1 (8), TTe (6), TLs1 (4), TP1 (4), TUl1 (3), Tdun1 (3), THe1 (3), TLed1 (2), TNo1 (1), TP2 (1), RCol1 (1).

Iphiclides podalirius (Linnaeus, 1758) - CEM - Mesofila; 4; IV-V, VII-VIII; 75/1270; *Prunus* e altri fruttiferi

ITALIA: Manca in Sardegna. CALABRIA: Comune in tutta la regione.

SILA GRECA: TUll (2), TCil (2), TLel (2), TEufl (2), TLe2 (1), RColl (1), TTe (1), TCa2 (1), TP3 (1), TGinl (1), c/o THel, c/o TCa, c/o TCel, c/o TLed1, c/o TCe2,

Parnassius mnemosyne (Linnaeus, 1758) - CAE - Mesofila; 3; fine V; 1570/1630; Corydalis

ITALIA: Alpi ed Appennini. Manca in Sardegna. CALABRIA: Tutti i principali rilievi escluse le Serre Catanzaresi.

SILA GRECA: Srad1 (1).

Zerynthia polyxena ([Denis & Schiffermüller], 1775) - ESE2 - Termofila; 2; IV-V; 65/1270; Aristolochia

ITALIA: Manca in Sardegna. CALABRIA: Tutto il territorio.

SILA GRECA: TUll (1), TEufl (1), TPrl (1), TCa (1), c/o TGinl.

PIERIDAE

Aporia crataegi (Linnaeus, 1758) - PAL - Mesofila; 4; fine V-inizi VII; 340/1630; Crataegus, Prunus ecc.

ITALIA: Manca in Sardegna. CALABRIA: Tutto il territorio.

SILA GRECA: TAq1 (8), TGin1 (8), RP2 (5), RP1 (3), TP3 (3), TEuf1 (1), TAg (1), TAq (1), Srad1 (1), c/o RCol1, c/o TCe1, c/o TAf.

Pieris brassicae (Linnaeus, 1758) - CEM, SCO* - Mesofila; 5; III, VI-VII, IX-XI; 0/1630; diverse crucifere

ITALIA: Tutte le regioni. CALABRIA: Tutto il territorio.

SILA GRECA: Rossano (PARENZAN, com. pers.), TAq1 (7), TLe5 (4), SPr1 (2), Srad1 (2), TLe3 (2), TP2 (2), TAq (2), Tdun1 (1), RCol1 (1), TCa2 (1), TCe1 (1), SPi2 (1), c/o TCe2, c/o TTe, c/o TP3.

Pieris edusa (Fabricius, 1777) - PAL + Eritrea – Termofila; 4; V-X; 0/1630; crucifere e resedace

ITALIA: Tutte le regioni. CALABRIA: Tutto il territorio.

SILA GRECA: Tdun1 (38), TGin1 (3), THe1 (2), Srad1 (2), RP1 (1), TTe (1), TPr1 (1), SPr1 (1), c/o TLs1, c/o TUl, c/o TLe5.

Pieris mannii (Mayer, 1851) - TUE1 - Termofila; 2; VII-IX; 1005/1150; Sinapis, Iberis sempervivum ecc.

ITALIA: Manca in Sardegna. CALABRIA: Sporadica in tutto il territorio.

SILA GRECA: TPi2 (4), TAq1 (1).

Pieris napi (Linnaeus, 1758) - OLA - Sciafila; 5; III-XI; 75/1635; Brassica e altre crucifere

ITALIA: Tutte le regioni. CALABRIA: Tutto il territorio.

SILA GRECA: TAg (25), TCa2 (10), TAq1 (9), TCa (6), TCe1 (6), TAq (6), SPi2 (5), Srad1 (4), SPr1 (4), RCol1 (3), TCa1 (3), TPi2 (3), SFag1 (3), TCe2 (2), TAf (2), TEuf1 (2), TLe3 (2), RQ1 (1), THe1 (1), TNo1 (1), TP2 (1), TTe (1), TGin1 (1), c/o TP3.

Pieris rapae (Linnaeus, 1758) - PAL, SCO* - Mesofila; 5; III-XI; 0/1635; diverse crucifere e resedacee

ITALIA: Tutte le regioni. CALABRIA: Tutto il territorio.

SILA GRECA: Rossano (PARENZAN, com. pers.), RCol1 (43), TUl1 (36), TTe (25), Tdun1 (14), TCa1 (11), TEuf1 (10), TLed (9), TPr1 (9), TGin1 (8), TLe3 (7), TP2 (7), TLe5 (6), RQ1 (6), TCa (6), TLs1 (6), TCa2 (5), TP3 (5), TP1 (4), TPi2 (4), TAq1 (4), Srad1 (4), TQ1 (3), THe1 (3), TEu1 (3), TNo1 (3), SPi2 (2), TAg (2), TCe2 (2), TLe1 (2), TCe1 (2), TCi1 (2), TNo3 (2), TPi1 (2), TLe2 (2), TNo2 (1), RP1 (1), SPr1 (1), SFag1 (1), c/o RP2.

Euchloe ausonia (Hübner, 1804) - OLA - Euritopa; 5; IV-V; 0/570; Iberis, Sisymbrium, Biscutella ecc.

ITALIA: Manca nelle regioni nordorientali. CALABRIA: Tutto il territorio.

SILA GRECA: Rossano, Piana Caruso (PARENZAN, com. pers.); Tdun1 (8), THe1 (3), RCol1 (2), RP1 (2), RP2 (2), TCi1 (2), TTe (2), TLs1 (1), TNo2 (1), TP1 (1), TUl1 (1), TPr1 (1).

Anthocharis cardamines (Linnaeus, 1758) - CAE - Mesofila; 3; III-V; 340/1270; Cardamine, Sisymbrium ecc.

ITALIA: Tutte le regioni. CALABRIA: Tutto il territorio.

SILA GRECA: TAg (4), TAq1 (3), TCa1 (2), RP2 (2), RP1 (1), RCol1 (1), TLe1 (1), TTe (1), TLe3 (1), TEuf1 (1), TAq (1), TGin1 (1), c/o TP2, c/o TCe1.

Anthocharis damone Boisduval, 1836 - TRI4 - Xerofila; 3; inizi V; 1150/1165; Isatis tinctoria

ITALIA: Calabria, Sicilia. CALABRIA: Versante ionico. All'autore è nota una popolazione sul versante tirrenico silano, nei pressi di Rogliano in provincia di Cosenza (Girimonte, com. pers.).

SILA GRECA: Monte Giummella, Cerenzia, Rossano, Corigliano (PARENZAN, 1980), TAq1 (1).

Colias crocea (Geoffroy, 1785) - CEM mac - Euritopa; 5; III-XI; 0/1630; varie leguminose Italia: Tutte le regioni. Calabria: Tutto il territorio.

SILA GRECA: RCol1 (22), SPi2 (11), Tdun1 (10), Srad1 (10), TP1 (6), TPr1 (6), TGin1 (6), TUl1 (4), SPr1 (4), TEuf1 (4), TTe (4), TP2 (3), RQ1 (3), TAq1 (3), TP3 (3), RP1 (2), RP2 (2), TLed (2), RLe1 (1), TCe2 (1), c/o THe1, c/o TCe1.

Gonepteryx cleopatra (Linnaeus, 1767) - MES mac - Termofila; 3; III-VIII, X-XI; 100/1250; Rhamnus

ITALIA: Penisola ed Isole. Sporadica nelle regioni alpine. CALABRIA: Segnalata solo per la provincia di Cosenza.

SILA GRECA: TLe1 (3), RLe1 (3), TEu1 (1), TLe2 (1), RQ1 (1), TTe (1), TCa2 (1), c/o TCe1, c/o TP3

Gonepteryx rhamni (Linnaeus, 1758) - PAL - Mesofila; 4; VI; 1150; Rhamnus Italia: Tutte le regioni. Calabria: Tutto il territorio.

SILA GRECA: TAq1 (1).

Leptidea sinapis (Linnaeus, 1758) - ASE1 - Sciafila; 2; V-VII, X; 350/1150; Lotus, Vicia, Lathyrus

Italia: Tutte le regioni. Calabria: Tutto il territorio.

SILA GRECA: TLe2 (3), TAg (3), TCa (2), RCol1 (1), RLe1 (1), TAq1 (1), c/o TTe.

LYCAENIDAE

Lycaena alciphron (Rottenburg, 1775) - EUM4 - Mesofila; 2; fine V-VI; 380/1150; Rumex Italia: Manca in Sardegna. Calabria: Sui principali rilievi, tranne le Serre catanzaresi. Sila Greca: TAq1 (5), TCe2 (1), c/o TAq, c/o RCol1, c/o TCa2.

Lycaena phlaeas (Linnaeus, 1761) - OLA - Euritopa; 4; IV-IX, XI; 0/1150; Rumex, Polygonum ecc.

Italia: Tutte le regioni. Calabria: Tutto il territorio.

SILA GRECA: RCol1 (5), TLed (4), TAq1 (2), RQ1 (2), TPr1 (2), TEuf1 (2), TUl1 (1), RP1 (1), TCi1 (1), TAg (1), TCe2 (1), SPr1 (1), TGin1 (1), TP3 (1), c/o Tdun1, c/o TCe1, c/o TTe.

Lycaena thersamon (Esper, 1784) - MEE4 - Termofila; 2; X; 340; Rumex, Sarothamnus Italia: Regioni appenniniche peninsulari. Calabria: Nota solo per Miglierina (Costa

A., 1882), Soverato (GALLO, 1978) e Conoide del Mucone (SCALERCIO, 1993/94). SILA GRECA: c/o RP2.

Lycaena tityrus (Poda, 1761) - CAE - Sciafila; 2; V, VII-IX; - 0/1100; Rumex

Italia: Manca in Sardegna. Calabria: Tutto il territorio.

SILA GRECA: TEuf1 (1).

Thecla quercus (Linnaeus, 1758) - EUM4 - Sciafila; 1; VII-X; 400/1090; Quercus spp. Italia: Tutte le regioni. Calabria: Tutto il territorio.

SILA GRECA: TCe1 (54), TCe2 (44), RQ1 (20), TQ1 (5), TLe4 (2), TCa2 (1), TPi2 (1).

Satyrium ilicis (Esper, 1779) - EUR2 - Sciafila; 1; VI-VII; 400/820; Quercus spp.

ITALIA: Manca in Sardegna. CALABRIA: Manca nelle aree più elevate.

SILA GRECA: TLe3 (34), TLe4 (9), TLe5 (2), RQ1 (2), TAg (2), TLed (1), TCe1 (1), TEuf1 (1), c/o TPr1, c/o TPi1, c/o TCa.

Callophrys rubi (Linnaeus, 1758) - SIE3 - Sciafila; 1; IV-V; 350/1630; Medicago, Genista, Sarothamnus ecc.

Italia: Tutte le regioni. Calabria: Tutto il territorio.

SILA GRECA: TCi1 (2), TLe2 (1), TCe1 (1), Srad1 (1), SPi2 (1).

Leptotes pirithous (Linnaeus, 1767) - CAM - Termofila; 2; IX-XI; 40/380; diverse leguminose

ITALIA: Tutte le regioni. CALABRIA: Nota per diverse aree poco elevate della provincia di Cosenza.

SILA GRECA: TU11 (1), RCol1 (1), c/o TLs1, c/o RP2.

Lampides boeticus (Linnaeus, 1767) - SCO - Sciafila; 5; fine VI-IX; 0/1630; Genista, Lupinus e altre leguminose

Italia: Tutte le regioni. Calabria: Tutto il territorio.

SILA GRECA: TGin1 (20), TU11 (4), Tdun1 (1), SPr1 (1), Srad1 (1), c/o TTe, c/o TP3.

Celastrina argiolus (Linnaeus, 1758) - OLA - Sciafila; 1; fine IV-VII; 350/1165; Aquifolium, Rhamnus ecc.

ITALIA: Tutte le regioni. CALABRIA: Mancavano segnalazioni per il Massiccio Silano. SILA GRECA: TAq (5), TLe2 (3), RLe1 (2), RQ1 (2), TAg (2), TLe3 (1), TAf (1), TAq1 (1).

Pseudophilotes baton (Bergsträsser, 1779) - TUE1 - Termofila; 1; fine IV, fine VI; 75/360; Thymus

ITALIA: Manca in Sardegna. CALABRIA: Tutto il territorio.

SILA GRECA: THe1 (1), RP1 (1).

Glaucopsyche alexis (Poda, 1761) - CAE1 - Mesofila; 1; V; 65/400; Astragalus, Citysus, Genista ecc.

ITALIA: Manca in Sardegna. CALABRIA: Tutto il territorio.

SILA GRECA: TLe3 (1), TLe2 (1), c/o TUl1.

Plebejus argus (Linnaeus, 1758) - ASE - Mesofila; 1; VII-inizi VIII; 1005/1630; diverse leguminose

ITALIA: Tutte le regioni. CALABRIA: Sui principali rilievi montuosi.

SILA GRECA: Srad1 (14), TAq1 (3), TPi2 (1), SPr1 (3), c/o TAq.

Lycaeides abetonica (Verity, 1910) - APP - Mesofila; 2; 29.VII.1997; 470; sconosciuta

ITALIA: Regioni appenniniche peninsulari. CALABRIA: Nota solo per Gioia Tauro (STAUDER, 1923/24), Raganello, Campotenese (GALLO & DELLA BRUNA, 1977) e Soverato (GALLO, 1978). SILA GRECA: c/o TTe.

Aricia agestis ([Denis & Schiffermüller], 1775) - ASE1 - Sciafila; 1; V-VII, IX-XI; 40/1570; Erodium, Centaurea ecc.

ITALIA: Manca in Sardegna. CALABRIA: Tutto il territorio.

SILA GRECA: TPr1 (4), TGin1 (3), TEuf1 (3), TAq1 (3), SPi2 (2), TTe (2), TEu1 (1), RP1 (1), RP2 (1), TCa2 (1), TCe2 (1), TPi2 (1), SPr1 (1), c/o TP3, c/o TLs1.

Cyaniris semiargus (Rottenburg, 1775) - CAE1 - Mesofila; 2; fine V-inizi VII; 890/1630; Armeria, Anthyllis ecc.

ITALIA: Manca in Sardegna. CALABRIA: Sui principali rilievi montuosi eccetto le Serre catanzaresi.

SILA GRECA: TCa1 (6), SPr1 (2), Srad1 (2), TAq1 (1), c/o TP3.

Polyommatus daphnis ([Denis & Schiffermüller], 1775) - EUS4 - Mesofila; 1; fine VII; 470; Orobus, Thymus, Astragalus ecc.

ITALIA: Manca in Sardegna. CALABRIA: Era nota solo per il Parco Nazionale del Pollino.

SILA GRECA: c/o TTe.

Polyommatus dorylas ([Denis & Schiffermüller], 1775) - EUS2 - Termofila; 1; IX; 1100/1270; Melilotus, Trifolium, Thymus ecc.

ITALIA: Regioni alpine ed appenniche. Manca nelle Isole. CALABRIA: Segnalata solo per Sila e Pollino.

SILA GRECA: TGin1 (4), TP3 (2), TAq1 (1).

Polyommatus icarus (Rottemburg, 1775) - PAL - Euritopa; 2; IV-XI; 0/1630; Trifolium e altre leguminose

ITALIA: Tutte le regioni. CALABRIA: Tutto il territorio.

SILA GRECA: RCol1 (64), TEufl (36), RQ1 (34), TPr1 (22), Tdun1 (22), TP2 (15), TUl1 (12), TGin1 (12), TLs1 (10), TP1 (9), RP1 (8), TTe (8), THe1 (6), TCa (6), TCa1 (6), TP3 (7), TCa2 (5), TAq1 (5), TCi1 (4), TEu1 (3), TAg (3), TCe2 (2), RP2 (2), TLed (2), TNo3 (1), THe2 (1), TLe2 (1), TQ1 (1), TCe1 (1), SPr1 (1), Srad1 (1), SPi2 (1), c/o TLe5.

Polyommatus thersites (Cantener, 1834) - TUE3 - Mesofila; 1; V-VII, IX-X; 75/560; Onobrychis

Italia: Manca in Sicilia e Sardegna. Calabria: Tutto il territorio.

SILA GRECA: RCol1 (9), RQ1 (5), THe1 (2), TEu1 (1), TCi1 (1), RP1 (1), RP2 (1), TAg (1), c/o TTe.

Nymphalidae

Nymphalis polychloros (Linnaeus, 1758) - CAE1 - Sciafila; 4; IV-VI, XI; 360/1635; Ulmus, Salix, Prunus, ecc.

Italia: Tutte le regioni. Calabria: Segnalata solo per Sila e Pollino.

SILA GRECA: SFag1 (2), TCa (1), c/o RP1.

Inachis io (Linnaeus, 1758) - ASE - Sciafila; 5; fine III-VI; 360/1630; soprattutto Urtica Italia: Tutte le regioni. Calabria: Tutto il territorio.

SILA GRECA: RLe1 (4), RP1 (1), TLe3 (1), TTe (1), TCa1 (1), Srad1 (1), c/o RCol1.

Vanessa atalanta (Linnaeus, 1758) - WPA, SCO* - Euritopa; 5; IV-V, X-XI; 0/1570; Urtica, Parietaria ecc.

ITALIA: Tutte le regioni. CALABRIA: Tutto il territorio.

SILA GRECA: Tdun1 (4), TAg (2), TLs1 (1), TNo1 (1), TCi1 (1), TLe5 (1), TPr1 (1), TCa1 (1), TCe1 (1), TCe2 (1), SPi2 (1), TP3 (1), c/o TUl1, c/o TTe, c/o SPr1.

Vanessa cardui (Linnaeus, 1758) - COS - Euritopa; 5; fine V-VIII, XI; 0/1630; Urtica, Cardus

Italia: Tutte le regioni. Calabria: Tutto il territorio.

SILA GRECA: Srad1 (5), SPi2 (2), TEuf1 (2), TLs1 (2), TP2 (2), Tdun1 (1), TTe (1), SPr1 (1), c/o TP1, c/o THe1, c/o THe2, c/oTNo1, c/o TCi1, c/o RP2.

Aglais urticae (Linnaeus, 1758) - ASE - Mesofila*; 5; V-inizi VII; 1270/1635; Urtica, Prunus, Pyrus ecc.

ITALIA: Manca in Sardegna. CALABRIA: Nota per tutti i principali rilievi tranne le Serre catanzaresi.

SILA GRECA: Srad1 (7), SPr1 (5), SPi2 (3), SFag1 (1), TGin1 (1).

*Sulle Alpi e in gran parte dell'Europa è considerata euritopa.

Polygonia c-album (Linnaeus, 1758) - ASE1 - Euritopa; 4; VI-VII; 560/1550; Urtica, Prunus, Corylus, ecc.

Italia: Tutte le regioni. Calabria: Mancano segnalazioni per Pollino, Orsomarso e Sila. Sila Greca: TAg (1), SPr1 (1).

Polygonia egea (Cramer, 1775) - EUS4 - Sciafila; 3; fine III, fine VII; 365/470; Parietaria officinalis, Urtica

ITALIA: Tutt'Italia, ma sporadica sulle Alpi. CALABRIA: Tutto il territorio tranne le Serre catanzaresi.

SILA GRECA: RLe1 (2), c/o TTe.

Argynnis adippe ([Denis & Schiffermüller], 1775) - ASE1 - Mesofila; 4; metà VI-metà VII; 470/575; Viola

ITALIA: Manca in Sardegna. CALABRIA: Nota per Aspromonte, Catena Costiera e Sila. SILA GRECA: TEufl (2), c/o TAg.

Argynnis aglaja (Linnaeus, 1758) - ASE1 - Mesofila; 3; inizi VII; 1630; *Viola, Polygonum* ITALIA: Manca in Sardegna. CALABRIA: Tutto il territorio montuoso.

SILA GRECA: c/o Srad1

Argynnis niobe (Linnaeus, 1758) - EUR4 - Mesofila; 3; VII-metà VIII; 1550/1630; Viola, Plantago ecc.

ITALIA: Regioni alpine ed appenniniche. Manca in Sardegna. CALABRIA: Tutto il territorio montuoso.

SILA GRECA: Srad1 (8), SPr1 (4), SPi2 (3).

Argynnis pandora ([Denis & Schiffermüller], 1775) - CAM mac - Sciafila; 2; fine VI, VIII-IX; 380/1630; Viola, Ruta

ITALIA: Sporadica solo al nord. CALABRIA: Mancano segnalazioni per le Serre catanzaresi. SILA GRECA: TGin1 (3), TLe4 (1), TCe1 (1), Srad1 (1), c/o TCa2, c/o TPi2, c/o RCol1, c/o TP3.

Argynnis paphia (Linnaeus, 1758) - ASE1 - Sciafila; 3; metà VI-VII, inizi X; 365/1005; Viola, Rubus idaeus ecc.

ITALIA: Tutte le regioni. CALABRIA: Non si hanno segnalazioni per Sila e Serre catanzaresi. SILA GRECA: TAg (6), TCa (4), TCa2 (3), RQ1 (3), RLe1 (1), TTe (1), TEufl (1), TPr1 (1), TPi2 (1), c/o RCol1.

Issoria lathonia (Linnaeus, 1758) - WPA - Mesofila; 4; V-IX; 380/1630; Viola, Onobrychis, Borrago

ITALIA: Tutte le regioni. CALABRIA: Nota solo per località della provincia di Cosenza. SILA GRECA: Srad1 (9), SPi2 (3), SPr1 (3), TGin1 (2), TPi2 (1), c/o RCol1, c/o TTe, c/o TAg.

Brenthis daphne ([Denis & Schiffermüller], 1775) - ASE - Sciafila; 2; metà VI-VII; 470/1630; Viola, Rubus

ITALIA: Manca in Sardegna. CALABRIA: Tutto il territorio montuoso.

SILA GRECA: TAg (3), TCa2 (2), TCa1 (1), Srad1 (1), c/o TTe.

Boloria euphrosyne (Linnaeus, 1758) - ASE - Sciafila; 2; fine V-metà VII; 1150; Viola, Fragaria ecc.

ITALIA: Manca in Sardegna. CALABRIA: Segnalata per Sila, Catena Costiera ed Aspromonte. SILA GRECA: TAq1 (4), TAq (1).

Melitaea aetherie (Hübner, 1826) - NAW7/9 - Termofila; 2; fine V; 100; Centaurea, Cynara cardunculus L.

ITALIA: Calabria e Sicilia. CALABRIA: Sila Greca.

SILA GRECA: TP1 (1), c/o TNo1.

Melitaea athalia (Rottemburg, 1775) - CAE - Mesofila; 2; fine V-metà VII; 380/1550; Plantago, Centaurea ecc.

ITALIA: Manca in Sardegna. CALABRIA: Mancavano segnalazioni per il massiccio silano. SILA GRECA: RQ1 (25), TCa (4), TAq1 (4), TCa2 (2), TEuf1 (2), TCa1 (2), RCol1 (1), TCe2 (1), c/o TPr1, c/o TCe1.

Melitaea cinxia (Linnaeus, 1758) - SIE1 - Mesofila; 2; fine V; 340/565; Centaurea, Plantago ecc.

ITALIA: Manca in Sardegna. CALABRIA: Nota esclusivamente per la provincia di Cosenza. SILA GRECA: RCol1 (4), RP1 (3), RP2 (2), TEuf1 (1).

Melitaea didyma (Esper, 1779) - PAL - Termofila; 2; fine V-metà VII; 40/1270; Plantago, Veronica ecc.

ITALIA: Manca in Sardegna. CALABRIA: Tutto il territorio.

SILA GRECA: RP2 (10), RCol1 (7), RP1 (7), TGin1 (6), RQ1 (5), TP3 (4), TLs1 (4), TEuf1 (4), TLed (3), TP1 (3), TP1 (2), c/o TLe1.

Melitaea fascelis (Esper, 1794) - TUE2 - Termofila; 2; fine V; 565; Verbascum thapsus L. Italia: Manca nelle Isole, localizzata al nord. Calabria: Segnalata per Catena Costiera, Pollino, Orsomarso, Aspromonte e valle del Crati. Sila Greca: TEufl (5).

Melitaea phoebe (Göeze, 1779) - ASE1 - Termofila; 2; metà VI; 550; Centaurea, Plantago Italia: Manca in Sardegna. Calabria: Tutto il territorio montuoso e collinare. Sila Greca: c/oTCa.

Charaxes jasius (Linnaeus, 1766) - AFM - Termofila; 3; VIII; 530; Arbutus unedo L. Italia: Regioni costiere, tranne nell'alto Adriatico. Calabria: Nota solo per Reggio Calabria (Barrett, 1910), Gioia Tauro (Longo, 1992) e Conoide del Mucone (Scalercio, 1993/94). Sila Greca: c/o TCi1.

Limenitis reducta Staudinger, 1901 - EUS4 - Sciafila; 2; VI-VII; 180/565; Lonicera Italia: Tutte le regioni. Calabria: Sporadica, ma in quasi tutto il territorio. Sila Greca: TEuf1 (2), c/o RLe1.

LIBYTHEIDAE

Libythea celtis (Laicharting, 1782) - ASE1 - Mesofila; 5; IV-VI, X-XI; 215/1550; Celtis australis L.

ITALIA: Tutte le regioni. CALABRIA: nota solo per Savelli, Piana Caruso, Monte Basilicò

(PARENZAN, 1980) e Valle Capra (SCALERCIO, 1993/94).

SILA GRECA: SPr1 (4), TPi1 (3), TPi2 (3), TGin1 (2), TP2 (2), TTe (1), TP3 (1), TCe1 (1), TAg (1), TPr1 (1), TCa (1), c/o TCe2, c/o TCa2, c/o TLed, c/o TEuf1.

SATYRIDAE

Kanetisa circe (Fabricius, 1775) - CAE - Termo-Sciafila; 2; fine VI-VII, IX-X; 370/1270; *Bromus*, *Festuca* ecc.

ITALIA: Tutte le regioni, scarsa sulle Alpi. CALABRIA: Tutto il territorio collinare.

SILA GRECA: TP3 (5), RP1 (4), RP2 (1), TPr1 (1), TGin1 (1).

Hipparchia blachieri (Fruhstorfer, 1908) - APP9 - Termofila; 2; fine VI, IX-XI; 40/1270; graminacee

ITALIA: Estreme regioni meridionali e Sicilia. CALABRIA: Nota solo presso Reggio Calabria (HIGGINS & RILEY, 1980), Valle Capra, Ponte Sproviere, Serra Perdirice, Passo della Crocetta, San Pietro (Paola) (SCALERCIO, 1993/94).

SILA GRECA: TP1 (12), TLs1 (8), Tdun1 (6), TU11 (5), RQ1 (5), THe1 (4), RLe1 (2), RCol1 (1), TPr1 (1), TEuf1 (1), c/o THe2, c/o TLed.

Hipparchia fagi (Scopoli, 1763) - EUS6 - Sciafila; 2; fine VII-inizi X; 550/1270; Holcus, Festuca ecc.

ITALIA: Manca in Sardegna. CALABRIA: Tutto il territorio.

SILA GRECA: TEuf1 (2), TGin1 (2), TCe1 (1), TQ1 (1), c/o TCa, c/o TP3.

Hipparchia hermione (Linnaeus, 1764) - EUR1 - Termo-Sciafila; 2; fine VII-metà VIII; 1570/1630; Festuca, Brachypodium ecc.

Italia: Alpi marittime ed Appennini. Manca nelle Isole. Calabria: Nota solo per Aspromonte, Pollino e Sila.

SILA GRECA: Srad1 (1), SPi2 (1).

Hipparchia semele (Linnaeus, 1758) - EUR3 - Termo-Sciafila; 2; VII-metà X; 1100/1270; Deschampsia, Agropyron ecc.

ITALIA: Manca in Sardegna. CALABRIA: Tutto il territorio montuoso.

SILA GRECA: TP3 (1), TGin1 (1).

Hipparchia statilinus (Hufnagel, 1766) - EUM - Termo-Sciafila; 2; VII-X; 0/1270; Bromus, Lolium, Festuca ecc.

ITALIA: Manca in Sardegna, non ovunque al nord. CALABRIA: Tutto il territorio.

SILA GRECA: TGin1 (10), TQ1 (8), TPr1 (7), TEuf1 (6), TP1 (4), TTe (4), THe1 (3), TEu1 (2), TCi1 (2), RP1 (2), Tdun1 (1), TLs1 (1), THe2 (1), TNo1 (1), TP2 (1), RQ1 (1), TP3 (1), c/o TAq1.

Melanargia arge (Sulzer, 1776) - APP9 - Termofila; 2; fine V-metà VI; 360/575; graminacee

ITALIA: Appennino centro-meridionale e Sicilia. CALABRIA: Tutto il territorio. SILA GRECA: TEuf1 (10), TLed1 (8), RP1 (2), TAg (1), TPr1 (1), TQ1 (1).

Melanargia galathea (Linnaeus, 1758) - EUM4 - Sciafila; 2; metà VI-inizi VIII; 340/1270; *Phleum, Triticum, Agropyron* ecc.

ITALIA: Manca in Sardegna. CALABRIA: Tutto il territorio.

SILA GRECA: TCa (9), TEuf1 (7), TCa2 (7), TCe1 (6), TGin1 (5), TQ1 (4), TLed (4), TAg (3), TCa1 (3), TPr1 (2), RQ1 (2), TPi2 (2), TCe2 (2), TAq1 (2), TP3 (2), TLe2 (1), RP1 (1), RCol1 (1), TTe (1).

Maniola jurtina (Linnaeus, 1758) - WPA - Sciafila; 2; V-VII, IX-X; 40/1630; Poa e altre graminacee

Italia: Tutte le regioni. Calabria: Tutto il territorio.

SILA GRECA: RQ1 (31), TP1 (10), RP1 (8), RP2 (6), RLe1 (5), TPr1 (5), TGin1 (5), TCa (3), TEuf1 (3), TLe3 (2), TLed (2), TLe2 (2), TAg (2), THe1 (2), TCa2 (2), TNo1 (2), TNo2 (2), TUl1 (2), TEu1 (2), TCi1 (2), TP2 (2), TLe1 (2), RCol1 (2), TLs1 (1), TTe (1), TQ1 (1), TCa1 (1), TAq (1), TP3 (1), Srad1 (1).

Hyponephele lupina (O.G. Costa, 1836) - CAM - Termofila; 1; IX; 65/100; sconosciuta ITALIA: Appennino e Sicilia.

CALABRIA: Segnalata solo per Monte Tinna (STAUDER, 1923/24) e Monte Manfriana (GALLO & DELLA BRUNA, 1977).

SILA GRECA: THe1 (3), THe2 (1), TU11 (1), TP1 (1).

Pyronia cecilia Vallantin, 1894 - MES - Termofila; 1; fine VI-metà X; 40/1270; Deschampia e altre graminacee

ITALIA: Tutte le regioni, molto sporadica al nord. CALABRIA: Tutto il territorio.

SILA GRECA: TPr1 (9), TLs1 (5), TLed (3), TNo1 (3), TEu1 (3), TP2 (3), TQ1 (3), TGin1 (2), RQ1 (2), TNo2 (2), TP1 (1), RP1 (1), TLe3 (1), c/o TTe.

Pyronia tithonus (Linnaeus, 1771) - EUS3 - Mesofila*; 2; VII-VIII; 380/1100; Poa annua L., Milium ecc.

Italia: Manca in Sicilia, sporadica al sud. Calabria: Nota solo per Campotenese (Balletto, Toso, Barberis & Rossaro, 1977) e Gambarie (Parenzan, 1980).

SILA GRECA: Foce torrente Coserie (PARENZAN, com., pers.); c/o RCol1, c/o TTe, c/o TP3.

* La specie viene considerata termofila in Italia centrosettentrionale, ma ha netta tendenza alla mesofilia in Sila Greca.

Coenonympha arcania (Linnaeus, 1761) - EUR2 - Sciafila*; 2; metà VI- metà VII; 550/1630; Melica e altre graminacee

ITALIA: Manca in Sicilia e Sardegna.

CALABRIA: Tutto il territorio montuoso tranne le Serre catanzaresi. SILA GRECA: TPi2 (2), TCa1 (2), TAg (1), TCa (1), TCe2 (1), TAf (1), SPr1 (1), Srad1 (1), c/o TP3.

* Questa specie in Italia centrosettentrionale è considerata principalmente mesofila, ma in Sila Greca e in tutta la Calabria sembra nettamente sciafila.

Coenonympha pamphilus (Linnaeus, 1758) - CEM - Euritopa; 2; IV-inizi IX; 40/1630; Poa annua L., Nardus stricta L. ecc.

ITALIA: Tutte le regioni. CALABRIA: Tutto il territorio.

SILA GRECA: TUl1 (13), RP1 (12), TEuf1 (9), RCol1 (8), TP1 (7), TP3 (4), TPr1 (4), TLs1 (3), TLed (2), TNo3 (1), TEu1 (1), TP2 (1), TTe (1), TPi2 (1), TGin1 (1), Srad1 (1).

Pararge aegeria (Linnaeus, 1758) - CAE1 - Sciafila; 1; IV-X; 0/1635; Agropyron, Poa, Triticum ecc.

ITALIA: Tutte le regioni. CALABRIA: Tutto il territorio.

SILA GRECA: TAg (33), TCa (7), RQ1 (4), Tdun1 (1), TEu1 (1), TLe3 (1), TPr1 (1), TCa1 (1), TAf (1), TAq (1), Srad1 (1), SFag1 (1), TGin1 (1).

Lasiommata maera (Linnaeus, 1758) - CAE1 - Termofila; 1; fine V-VI, IX-inizi X; 565/1270; Glyceria, Poa, Lolium ecc.

ITALIA: Manca in Sardegna. CALABRIA: Tutto il territorio montuoso tranne le Serre catanzaresi.

SILA GRECA: TGin1 (3), TCa1 (1), TEuf1 (1), c/o TCa2, c/o TAq1, c/o TP3.

Lasiommata megera (Linnaeus, 1767) - WPA - Termofila; 1; IV-XI; 0/1630; Poa, Dactylis, Brachypodium ecc.

ITALIA: Manca in Sardegna. CALABRIA: Tutto il territorio.

SILA GRECA: TLs1 (12), TEuf1 (10), TTe (8), TQ1 (8), TLed (8), TP2 (7), TPr1 (7), TGin1 (7), TUl1 (4), TNo1 (4), TAg (4), TEu1 (4), Srad1 (4), Tdun1 (3), TAq1 (3), TP1 (2), RQ1 (2), TCe1 (2), TCa1 (2), SPr1 (2), TCi1 (2), THe1 (2), THe2 (2), TNo3 (1), RP2 (1), TLe5 (1), TCa (1), TCa2 (1), TPi2 (1), SPi2 (1), TP3 (1).

Danaidae

Danaus chrysippus (Linnaeus, 1758) - SCO - Termofila; 5; X; 0; Asclepias Italia: Regioni costiere dell'Italia meridionale. Calabria: Segnalata solo genericamente da Curò (1874/80) e per Cetraro da Arnone & Romano (1991). Sila Greca: Tdun1 (1).

DISCUSSIONE

L'analisi quali-quantitativa dei dati ci ha permesso di ricostruire il paesaggio taxocenotico dei Lepidotteri ropaloceri nella Sila Greca. Per schematizzare i risultati si ritiene sufficiente discutere separatamente i differenti biomi ed al loro interno discriminare fra formazioni boschive, con bassa trasparenza orizzontale, e formazioni erbacee, ad elevata trasparenza orizzontale (prati, pascoli ecc.).

BIOMA DELLE SCLEROFILLE. A questo bioma sono riconducibili 25 punti di osservazione distribuiti in biotopi azonali (litorale, fiumare, calanchi), che mantengono ancora un carattere piuttosto naturale, e secondari (uliveti, rimboschimenti).

Le comunità delle formazioni erbacee del bioma delle sclerofille (tab. 1) sembrano differenziarsi fra loro soprattutto in base ai differenti valori che raggiunge la coper-

Tab. 1. Scale delle abbondanze relative registrate nei differenti punti di osservazione afferenti alle formazioni erbacee del bioma delle sclerofille. I valori sono stati calcolati sulla base dei dati cumulativi di tutta una stagione di volo.

	Tdun1	THe1	THe2.	TLs1	TP1	TP2	RP1	RP2	RC011
			<u> </u>		Ε		<u>~</u>	<u>~</u>	
Polyommatus icarus	0.19	0.17	0.20	0.15	0.14	0.29	0.12	0.06	0.36
Lasiommata megera	0.03	0.06	0.40	0.18	0.02	0.14		0.03	•
Pieris rapae	0.12	0.09		0.09	0.06	0.14	0.01	•	0.24
Maniola jurtina		0.06		0.02	0.16	0.04	0.12	0.17	0.01
Melitaea didyma		•		0.06	0.03		0.10	0.28	0.04
Hipparchia blachieri	0.05	0.11		0.12	0.19		•		0.01
Colias crocea	0.09	•	•	0.02	0.10	0.06	0.03	0.06	0.12
Hipparchia statilinus		•		0.05	0.11	0.02	0.18	•	0.04
Coenonympha pamphilus	0.01	0.09	0.20	0.02	0.06	0.02	0.03	•	
Pieris edusa	0.32	0.06					0.01		
Hyponephele lupina		0.09	0.20		0.02	•			
Euchloe ausonia	0.03	0.09		0.06	0.06	0.02			0.01
Papilio machaon	0.07	0.09		0.02	0.02		0.03	0.06	0.01
Aporia crataegi							0.04	0.14	
Pyronia cecilia				0.08	0.02	0.06	0.01	•	
Polyommatus thersites		0.06					0.01	0.03	0.05
Melitaea cinxia				0.06		0.06			
Thymelicus flavus		•		•			0.04	0.06	0.02
Kanetisa circe	•			0.05		0.02	•	•	
Vanessa cardui	0.01	•	6	0.03		0.04			
Anthocaris cardamines						4	0.06	0.03	
Thymelicus acteon		0.03				0.02			0.02
Pieris napi	0.01					0.04			0.01
Pieris brassicae	0.03			0.02					
Lycaena phlaeas							0.01	0.06	0.01
Vanessa atalanta		0.03					0.01		
Pseudophilotes baton	0.01						0.01		0.03
Thymelicus lineolus							0.01	0.03	
Aricia agestis							0.01	0.03	
Lybithea celtis							0.03		
Spialia sertorius							0.03		
Melanargia arge			•			0.04			
Carcharodus alceae							0.03		0.01
Melanargia galathea							0.01		0.01
Melitaea aetherie	•	•	•		0.02				
Inachis io	•	•	•		•		0.01		
Lampides boeticus	0.01	•	•						
Lycaena tityrus	0.01	•		•	•	•	•		
Pararge aegeria	0.01	•	•	•	•	*	•	•	
Danaus chrysippus	0.01	•		•		•	•	•	•
Gegenes pumilio	0.01	•	•	•	•	•	•	•	
Melitaea athalia		•	•	•	٠	4	•	•	0.01
Leptidea sinapis	•	•	•	•	•	•	•	•	0.01
Leptothes pirithous		•	•	•	*	0	•	4	0.01
Pyrgus malvoides	٠	•	•	•			6	4	0.01
Iphiclides podalirius	•	•	•	•	•	•	4	•	0.01
ipmendes podamius	d	*	•	*	•	•	•	•	0.01

tura vegetale del suolo. Mentre nei pascoli e nelle steppe a Lygeum spartum L. sono Coenonympha pamphilus, Pieris rapae e Colias crocea ad avere popolazioni ben rappresentate, nelle garighe ad elicriso è stata rilevata, e con relativamente bassa densità, solo Pieris rapae. Le entità più uniformemente distribuite sul territorio sono certamente Euchloe ausonia in primavera, Lasiommata megera, che non soffre della scarsa copertura erbacea per la sua spiccata eliofilia, Polyommatus icarus, la quale pur preferendo biotopi erbosi riesce a penetrare col favore della stagione autunnale anche nel greto della fiumara, e Hipparchia blachieri. Quest'ultima è l'elemento maggiormente caratterizzante raggiungendo elevati valori di frequenza, abbondanza e densità in quasi tutti i punti di osservazione. Hipparchia blachieri ha una fenologia tipicamente autunnale essendo sporadica in primavera e mancando del tutto in estate. Mentre la comunità costiera si caratterizza per la grande abbondanza di Pieris edusa, presente anche altrove ma con densità e frequenze non paragonabili, nella gariga ad elicriso della fiumara la specie più tipica è Hyponephele lupina che vola in estate, quando il clima arido riduce le popolazioni delle altre specie al minimo. In biotopi leggermente mesofili, per l'altezza del manto erboso o per la quota superiore ai 200 m s.l.m., assumono importanza specie tendenzialmente sciafile come Pyronia cecilia, Maniola jurtina e Melitaea didyma alle quali si associa, ma solo ai margini della lecceta o nei pascoli abbandonati, la mesofila Melitaea cinxia. Nel complesso le comunità rilevate hanno maggiore sviluppo in primavera ed in autunno, quando lo strato vegetale offre risorse alimentari per gli adulti, ma ai limiti superiori del bioma la fenologia cambia e in autunno si assiste ad un crollo della densità delle popolazioni. Non si può escludere, ma per il momento neanche affermare con assoluta certezza, che l'aumento piuttosto generalizzato dell'attività autunnale sia dovuta in parte allo spostamento verso il basso di alcune specie più tipiche del limite superiore del bioma delle sclerofille o della fascia sannitica e in parte alla conquista degli spazi aperti da parte di specie eunemorali per l'allargamento dello spettro di habitat a loro favorevoli provocato dall'aumento della mesofilia ambientale. Nel primo caso sembrano rientrare il rinvenimento di Polyommatus thersites nell'elicriseto THe1 e di Libythea celtis nel pascolo TP2, nel secondo la frequente ricorrenza di Pararge aegeria in Tdun1.

Gli elementi più abbondanti e vagili delle formazioni erbacee tendono a penetrare nei boschi di limitata estensione ed elevata trasparenza orizzontale, influenzando in maniera importante la composizione delle comunità (tab. 2). Questo è stato verificato soprattutto in TUI1, dove le entità tendenzialmente nemorali sono rappresentate in maniera relativamente cospicua solo da *Iphiclides podalirius*, e in TLed, nella cui comunità gli individui delle specie sciafile raggiungono appena l'8%. In estate, soprattutto alle basse quote, alcune specie praticole sciafile come *Pyronia cecilia*, *Maniola jurtina* e *Hipparchia statilinus* entrano a far parte delle comunità dei rimboschimenti ad eucalipto e dei boschetti alveali riconosciuti, durante la stagione più calda, come biotopi rifugio. Le comunità assumono caratteristiche più peculiari nelle leccete dove, pur permanendo la possibilità di rinvenire specie trasgressive in presenza di uno strato erbaceo piuttosto sviluppato, le entità sciafile nemorali a bassa vagilità hanno un netto incremento. In particolare *Celastrina argiolus* caratterizza le facies più umide di fondo valle, mentre *Satyrium ilicis* quelle più aride di crinale. Dove le situazioni microclimatiche e

Tab. 2. Scale delle abbondanze relative registrate nei differenti punti di osservazione afferenti alle formazioni boschive del bioma delle sclerofille.

	TUII	TNo1	TN ₀ 2	TN03	TEu1	RLe1	TLe1	TLe2	TPi1	TLe3	TLe4	TLes	TCil	Tled	RQ1
Pieris rapae	0.387	0.187	0.142	0.333	0.136	.0.181	0.117	0.4	0.132		0.428	0.068	0.155	0.038	
Satirium ilicis									0.641	0.75	0.142		0.017		0.012
Maniola jurtina	0.021	0.125	0.285		0.090	0.227	0.181	0.117		0.037			0.068	0.034	0.198
Lasiommata megera	0.043	0.25		0.166	0.181							0.071	0.068	0.137	0.012
Polyommatus icarus	0.129			0.166	0.136			0.058				,	0.137	0.034	0.217
Pyronia cecilia		0.187	0.285		0.136					0.018				0.051	0.012
Libythea celtis									0.6					0.017	
Gonepteryx cleopatra					0.045	0.136	0.272	0.058						0.017	0.006
Coenonympha pamphilus	0.139		0.142	0.166	0.045									0.034	
Papilio machaon	0.032	0.062											0.275	0.034	
Celastrina argiolus						0.090	0.090	0.176		0.018					0.012
Iphiclides podalirius	0.021						0.181	0.058					0.068		
Pieris brassicae										0.037		0.285			
Theela quereus											0.166				0.128
Carcharodus alceae	0.010			0.166				0.058						0.017	
Hipparchia statilinus		0.062			0.090								0.068.	0.006	
Euchloe ausonia	0.010		0.142										0.068		
Leptidea sinapis						0.045		0.176							
Inachis io						0.181				0.018					
Vanessa atalanta		0.062										0.071	0.034	0.017	
Hipparchia blachieri	0.053					0.090						•			0.032
Melitaea athalia															0.160
Colias crocea	0.043					0.045								0.034	0.019
Melanargia galathea								0.058						0.068	0.012
Melanargia arge								,						0.137	
Callophrys rubi								0.058					0.068		
Lycaena phlaeas	0.010								,				0.034	0.068	0.012
Thymelicus flavus	0.010					0.045								0.068	
Polyommatus thersites					0.045								0.034		0.032
Anthocaris cardamines		,					0.090			0.018					
Pieris napi		0.062								0.037					0.006
Polygonia egea						0.090									
Pararge aegeria					0.045					0.018					0.025
Melitaea didyma														0.051	0.032
Argynnis pandora											0.083				
Glaucopsyche alexis								0.058		0.018					
Argynnis paphia					,	0.045								,	0.019
Aricia agestis	,				0.045										
Lampides boeticus	0.043													,	
Thymelicus acteon	0.010														
Zerynthia polyxena	0.010														
Hyponephele lupina	0.010														
Leptotes pirithous	0.010											,			
- I				-											

geomorfologiche favoriscono l'instaurarsi di una vegetazione extrazonale le comunità subiscono di riflesso un arricchimento di specie legate da una parte alla vegetazione (e questo è il significato della presenza di *Thecla quercus* che caratterizza qualitativamente RQ1), dall'altra esclusivamente alle condizioni climatiche. Fenologicamente si osservano due situazioni differenti. Nelle stazioni situate alle quote inferiori in estate viene mantenuta una discreta densità anche per l'effetto-rifugio di cui abbiamo già accennato,

Tab. 3. Scale delle abbondanze relative registrate nei differenti punti di osservazione afferenti alle formazioni erbacee della fascia sannitica.

	TPr1	TTe	TEuf1
Polyommatus icarus	0.226	0.109	0.253
Pieris rapae	0.092	0.342	
Lasiommata megera	0.072	0.109	0.070
Hipparchia statilinus	0.072	0.054	0.042
Colias crocea	0.061	0.054	0.028
Coenonympha pamphilus	0.041	0.013	0.063
Pyronia cecilia	0.092	•	
Aricia agestis	0.041	0.027	0.021
Spialia sertorius	0.030		0.056
Maniola jurtina	0.051	0.013	0.021
Thymelicus flavus	0.0206	0.012	0.063
Melanargia galathea	0.020	0.013	0.049
Papilio machaon		0.082	
Melanargia arge	0.010	0.062	0.070
Melitaea didyma	0.030	•	0.028
Euchloe ausonia	0.010	0.027	0.028
Melitaea fascelis	0.010	0.027	
	. 0.020	•	0.035
Lycaena phlaeas	0.020	. 0.012	0.014
Argynnis paphia	0.010	0.013	0.007
Pieris napi	•	0.013	0.014
Iphiclides podalirius	•	0.013	0.014
Vanessa cardui		0.013	0.014
Pieris edusa	0.010	0.013	•
Libythea celtis	0.010	0.013	•
Vanessa atalanta	0.010	0.013	•
Thymelicus acteon	•	·	0.021
Anthocaris cardamines	•	0.013	0.007
Zerynthia polyxena	0.010	•	0.007
Hipparchia blachieri	0.010	•	0.007
Melitaea athalia		•	0.014
Limenitis reducta		•	0.014
Argynnis adippe	•	•	0.014
Hipparchia fagi		•	0.014
Inachis io		0.013	
Gegenes pumilio	•	0.013	
Gonepteryx cleopatra		0.013	
Pararge aegeria	0.010		
Carcharodus alceae	0.010		
Kanetisa circe	0.010		
Nymphalis polychloros	0.010		•
Lycaena tityrus			0.007
Lasiommata maera	-	•	0.007
Melitaea cinxia	•	·	0.007
Aporia crataegi	•	•	0.007
Satyrium ilicis	•	•	0.007
Satyffulli filolo	•	•	0.007

mentre nelle leccete ed a quote vicine a quelle del limite superiore del bioma delle sclerofille perde quasi del tutto significato parlare di comunità estive o autunnali, essendo composte da pochi individui e pochissime specie. Questo è imputabile solo in piccola misura alla presenza di specie monovoltine primaverili dal momento che è stato censito un notevole contingente di polivoltine che non si ripresentano in questi biotopi nelle altre stagioni. Solo nei biotopi più termofili e dove la trasparenza orizzontale sale a livelli compatibili con le esigenze di volo delle specie più vagili è possibile rilevare un discreto popolamento in lepidotteri ropaloceri (TUI1, TLed).

FASCIA SANNITICA. I nove punti di osservazione riconducibili alla fascia sannitica sono in gran parte distribuiti in formazioni boschive a causa della scarsa reperibilità di quelle erbacee che, in ogni caso, raggiungono una limitata superficie e possono risentire dell'effetto bordo. Il grado di naturalità dei biotopi collinari è mediamente più elevato che nel bioma delle sclerofille.

Le ridotte superfici dei biotopi erbacei collinari hanno come conseguenza un aumento medio della diversità specifica rispetto al bioma precedente, imputabile all'effetto bordo che permette ad un discreto contingente di elementi sciafili e mesofili, tendenzialmente nemorali, come Argynnis paphia, Argynnis adippe ecc., di ricorrere con una certa frequenza (tab. 3). Queste specie però raggiungono il massimo di presenza in autunno, quando vedono lo spettro di habitat loro disponibile spostarsi verso quelli aperti per l'aumento della mesofilia ambientale e per la diminuzione dell'insolazione. In questa stagione diventano quantitativamente e qualitativamente importanti anche le specie altamente vagili. Le entità più caratterizzanti sono invece Melanargia galathea, mesofila e sciafila, favorita anch'essa dall'effetto bordo, e altre specie decisamente più termofile che si rinvengono principalmente in primavera ed estate: Melitaea didyma, Melanargia arge e Aricia agestis. In negativo queste comunità possono essere caratterizzate, rispetto a quelle del bioma delle sclerofille, per la presenza solo sporadica di Hipparchia blachieri. Per il resto non mancano di dominare nei rilievi quantitativi le solite praticole bivoltine o polivoltine abbondanti anche a quote inferiori. Fenologicamente le comunità delle formazioni erbacee della fascia sannitica assumono un comportamento peculiare essendo possibile rinvenire una discreta densità nei popolamenti in tutte le stagioni, grosso modo come avviene nelle formazioni boschive ad alta trasparenza orizzontale del bioma delle sclerofille.

Le comunità delle differenti formazioni boschive della fascia sannitica sono piuttosto omogenee e facilmente caratterizzabili (tab. 4). Mentre nei castagneti le entità mesofile, sciafile e nemorali dominanti sono Melanargia galathea, che si rinviene costantemente in tutti i boschi, Argynnis paphia, Pieris napi e Coenonympha arcania, nelle quercete si aggiunge in maniera determinante Thecla quercus, tipicamente legata da rapporti trofici con diverse specie di querce. Nelle facies più umide le cenosi si arricchiscono di specie con tendenze più o meno marcate alla igrofilia. In questi casi Pararge aegeria, Celastrina argiolus e Brenthis daphne sono le entità più caratterizzanti. Dove il tenore di umidità scende in modo sostanziale, Pyronia cecilia e Hipparchia statilinus sostituiscono le specie precedenti. La fenologia ha un andamento in accordo con il clima tipico di queste formazioni vegetali. Nei castagneti in autunno non si rinviene una vera comunità, ma solo individui sporadici di specie polivoltine o svernanti, e nelle quercete si assiste al prevalere in maniera quasi assoluta delle popolazioni di *Thecla quercus* che vengono solo raramente affiancate da alcuni individui di entità altamente vagili. In questa fascia è l'estate la stagione più importante durante la quale si registra un massimo della densità specifica e di individui, la primavera passa quindi in secondo ordine.

FASCIA SUBATLANTICA. Le 10 stazioni campionate in questa fascia sono uniformemente distribuite fra ambienti aperti e ambienti chiusi. Purtroppo in autunno, a causa delle cattive condizioni metereologiche, non è stato possibile raccogliere i dati in SPr1, SPi2,

Tab. 4. Scale delle abbondanze relative registrate nei differenti punti di osservazione afferenti alle formazioni boschive della fascia sannitica.

	TAg	TCa	TCa1	TCa2	TQ1	TCe1	TCe2
Thecla quercus Pieris napi 0.032786885	0.221	0.107	0.054	0.022 0.227	0.131	0.675 0.075	0.721
Melanargia galathea	0.026	0.160	0.054	0.159	0.105	0.075	0.032
Pieris rapae	0.017	0.107	0.2	0.113	0.078	0.025	0.065
Thymelicus flavus	0.097	0.071	0.181	0.068	0.052	0.025	
Pararge aegeria	0.292	0.125	0.018		0.026		
Polyommatus icarus	0.026	0.107	0.109	0.113	0.026	0.012	0.032
Lasiommata megera	0.035	0.017	0.036	0.022	0.210	0.025	
Hipparchia statilinus	0.008				0.210		
Argynnis paphia	0.053	0.071		0.068			
Melitaea athalia		0.071	0.036	0.045			0.016
Maniola jurtina	0.017	0.053	0.018	0.022	0.026		•
Cyaniris semiargus			0.109				
Brenthis daphne	0.026		0.018	0.045			
Coenonympha arcania	0.008	0.017	0.036				0.016
Pyronia cecilia					0.078		
Anthocaris cardamines	0.035		0.036				
Vanessa atalanta	0.017		0.018			0.012	0.016
Leptidea sinapis	0.026	0.035					
Libythea celtis	0.008	0.017				0.012	
Aricia agestis				0.022			0.016
Hipparchia fagi					0.026	0.012	
Pieris brassicae				0.022		0.012	
Melanargia arge	0.008				0.026		
Satyrium ilicis	0.017					0.012	
Lycaena phlaeas	0.008						0.016
Gonepteryx cleopatra				0.022			
Iphiclides podalirius				0.022	•		*
Ochlodes venatus			0.018				•
Lasiommata maera			0.018				•
Inachis io		•	0.018				
Spialia sertorius			0.018				
Nymphalis polycholoros		0.017	•				
Zerynthia polyxena		0.017					
Celastrina argiolus	0.017						
Lycaena alciphron							0.016
Colias crocea							0.016
Callophrys rubi						0.012	
Argynnis pandora						0.012	
Aporia crataegi	0.008			•			
Polygonia c-album	0.008						
Polyommatus thersites	0.008	•	•		•		•

Srad1 e SFag1. Le formazioni erbacee della fascia subatlantica, quasi tutte di origine antropica, si limitano a radure create dal pascolo e a coltivi che, in seguito all'abbandono delle attività agro-pastorali, possono venire colonizzati da diversi arbusti. Le formazioni boschive sono molto estese lungo la corona di vette esterna dell'altopiano e diventano frammentarie nell'altopiano.

Le formazioni erbacee ospitano delle comunità ben caratterizzabili al cui interno possono essere individuate tre differenti situazioni tipo (tab. 5). L'unica stazione (TAq1) censita sui ripidi versanti esposti a nord-est si caratterizza per la presenza di *Thymelicus lineola*, *Boloria euphrosyne* e *Pyrgus malvoides*, favorite dal relativamente elevato teno-

Tab. 5. Scale delle abbondanze relative registrate nei differenti punti di osservazione afferenti alle formazioni erbacee della fascia subatlantica.

	TP3	TGin1	SPr1	Srad1	TAq1
Colias crocea	0.068	0.045	0.088	0.106	0.032
Polyommatus icarus	0.159	0.091	0.022	0.010	0.054
Pieris rapae	0.113	0.061	0.022	0.042	0.043
Plebejus argus	•	•	0.066	0.148	0.032
Pieris napi		0.007	0.088	0.042	0.098
Aporia crataegi	0.068	0.061	•	0.010	0.087
Lasiommata megera	0.022	0.053	0.044	0.042	0.032
Aglais urticae		0.007	0.111	0.074	
Lampides boeticus		0.152	0.022	0.010	
Issoria lathonia		0.015	0.066	0.095	•
Argynnis niobe			0.088	0.085	
Pieris brassicae			0.044	0.021	0.076
Melitaea didyma	0.090	0.045			
Thymelicus lineola	0.070	0.015	0.022	•	0.109
Libythea celtis	0.022	0.015	0.088	•	0.109
Kanetisa circe	0.113	0.007	0.000	•	•
Vanessa cardui			0.022	0.095	•
	0.090	0.007	0.022	0.010	•
Coenonympha pamphilus			•		0.021
Melanargia galathea	0.045	0.038	•	•	0.021
Hipparchia statilinus	0.022	0.076	•	•	0.010
Polyommatus dorylas	0.045	0.030	•	•	0.010
Thymelicus flavus	•	0.083		•	
Aricia agestis		0.022	0.022		0.032
Cyaniris semiargus	•		0.044	0.021	0.010
Lycaena phlaeas	0.022	0.007	0.022		0.021
Maniola jurtina	0.022	0.0381	•	0.010	•
Pieris edusa		0.0229	0.022	0.021	•
Pyrgus malvoides			•		0.054
Lycaena alciphron				•	0.054
Boloria euphrosyne			•		0.043
Melitaea athalia					0.043
Hesperia comma			0.022	0.021	
Anthocaris cardamines		0.007	•		0.032
Argynnis pandora		0.022		0.010	
Coenonympha arcania			0.022	0.010	
Pyrgus onopordi			0.022	0.010	
Iphiclides podalirius	0.022	0.007			
Hipparchia semele	0.022	0.007			•
Lasiommata maera		0.022			
Carcharodus alceae	0.022				
Vanessa atalanta	0.022				
Polygonia c-album			0.022		
Pyrgus carthami					0.021
Ochlodes venatus					0.021
Erynnis tages				0.021	
Pararge aegeria	•	0.007	•	0.010	•
Pyronia cecilia	•	0.015	•	0.010	•
Hipparchia fagi	•	0.015	•	•	•
Anthocaris damone	•	V+V1.	•	•	0.010
Gonepteryx rhamni	•	•	•	•	0.010
Leptidea sinapis	•	•	•	•	0.010
		•	•	•	0.010
Celastrina argiolus	•	•	•	•	0.010
Pieris mannii	•	٠	•	0.010	0.010
Callophrys rubi	•	•		0.010	
Parnassius mnemosyne	•	*	٠	0.010	•
nachis io	•	•	•	0.010	٠
Carcharodus flocciferus	•	•	•	0.010	٠
Brenthis daphne	•	•	•	0.010	•
Hipparchia alcyone	•	6		0.010	

Tab. 6. Scale delle abbondanze relative registrate nei differenti punti di osservazione afferenti alle formazioni boschive della fascia subatlantica

	TPi2	TAq	TAf	SFag1	SPi2
Pieris napi	0.115	0.315	0.4	0.375	0.135
Celastrina argiolus	•	0.263	0.2		•
Pararge aegeria	•	0.052	0.2	0.125	
Pieris rapae	0.153		•	0.125	0.054
Colias crocea	•		•		0.297
Coenonympha arcania	0.076	•	0.2		•
Nymphalis polychloros		•	•	0.25	
Aglais urticae	•	•		0.125	0.081
Libythea celtis	0.115	0.052			•
Pieris mannii	0.153	•	•		•
Pieris brassicae	•	0.105	•	•	0.027
Issoria lathonia	0.038	•	•	•	0.081
Argynnis niobe	•		•	•	0.081
Melanargia galathea	0.076		•	•	
Lasiommata megera	0.038	•	•	•	0.027
Vanessa cardui		•	•	•	0.054
Anthocaris cardamines	•	0.052		•	•
Boloria euphrosyne		0.052		•	
Aporia crataegi	•	0.052	•	•	•
Maniola jurtina	•	0.052	•	•	•
Aricia agestis	0.038	•	•	•	•
Plebejus argus	0.038	•	•	•	•
Coenonympha pamphilus	0.038	•	•	•	
Thecla quercus	0.038	•	•	•	•
Hipparchia fagi	0.038	•	•	•	•
Argynnis paphia	0.038	•	•	•	•
Callophrys rubi	•		•	•	0.027
Vanessa atalanta	•	•	•	•	0.027
Parnassius mnemosyne	•	•	•		0.027
Erynnis tages	•	•		•	0.027
Hipparchia alcyone	•				0.027
Polyommatus icarus	•	•	•		0.027

re di umidità, e di specie sciafile tendenzialmente nemorali (Anthocaris cardamines, Melanargia galathea, Pieris napi ecc.), a causa della limitata superficie che favorisce un certo effetto bordo. In estate la comunità che si rinviene è simile a quella delle radure presenti sulla corona di vette che limita esternamente l'Altopiano Silano le quali ospitano un popolamento in cui dominano Plebejus argus, elemento comune a TAq1, Aglais urticae e Argynnis niobe. Queste due situazioni sono simili per l'abbondante ricorrenza di individui appartenenti a specie mesofile e per la fenologia che vede le comunità autunnali estremamente rarefatte a vantaggio di quelle primaverili ed estive. Comunità decisamente differenti sono ospitate, invece, sull'altopiano dove sono presenti delle cospicue popolazioni di specie termofile che prevalgono sia nei rilievi quantitativi che in quelli qualitativi. Alcune di esse (Melitaea didyma, Hipparchia statilinus e Pyronia cecilia) sono particolarmente abbondanti a basse quote e qui sembrano favorite dagli elevati valori che le temperature raggiungono in estate e dall'aridità diffusa causata dalla permeabilità del sabbione granitico derivante dalla disgregazione della roccia madre. La specie più caratteristica di queste formazioni è, comunque, la termofila Polyommatus dorylas che compare nella seconda metà dell'estate ed è assente a quote inferiori ai 1100 m. A discriminare fra i due biotopi studiati sull'altopiano è il contingente di specie tendenzialmente nemorali presente in TGin1. Particolare significato vi assume la grande abbondanza di *Lampides boeticus*, attratta dalla notevole disponibilità di risorse alimentari per le larve dato i discreti valori di copertura che vi raggiungono le ginestre, insieme ad altre leguminose pianta nutrice degli stadi larvali.

La costante ed abbondante presenza di Pieris napi in tutte le comunità delle formazioni boschive non basta per identificare una unica situazione standard che si ripete nello spazio (tab. 6). È ancora una volta la trasparenza orizzontale che gioca un ruolo importante e che definisce due differenti situazioni. Nella prima, dove la trasparenza orizzontale è limitata, le specie sciafile hanno una netta prevalenza, fino a raggiungere il 100 % in TAf, ed insieme a quelle mesofile completano la comunità; nella seconda, con elevata trasparenza orizzontale, pur rimanendo cospicuo il contributo delle specie sciafile, assumono una grande importanza quelle euricore che diventano le più abbondanti in SPi2. Particolarmente interessante è notare come in tutte le stazioni, a prescindere dalla trasparenza orizzontale, le comunità siano caratterizzate da specie provviste di una vagilità media elevata. Questo dato può essere interpretato come mancanza di specie tipiche legate a queste formazioni e conseguente aumento di importanza degli elementi praticoli trasgressivi. Nei rilievi dominano le solite specie rinvenibili in quasi tutti i boschi come Pararge aegeria, Pieris napi e Celastrina argiolus; di esse solo l'ultima sembra essere influenzata dal differente manto vegetale assumendo grande importanza soprattutto in TAq dove le larve trovano abbondante nutrimento su Ilex aquifolium. Fenologicamente non si discostano molto dalle formazioni erbacee.

CONSIDERAZIONI FAUNISTICHE

Durante queste ricerche sono state rinvenute 94 specie (15 Hesperiidae, 4 Papilionidae, 13 Pieridae, 20 Lycaenidae, 23 Nymphalidae, 1 Libytheidae, 17 Satyridae e 1 Danaidae) e 2.401 individui. Interessanti sono state le catture di *Melitaea aetherie* nota in Italia continentale solo per la Sila Greca, di *Gegenes nostradamus, Pyrgus carthami*, e *Leptotes pirithous* segnalate solo diversi anni fa, di *Sloperia proto*, *Polyommatus daphnis* e *Hipparchia hermione* raccolte prima d'ora solo sul Pollino, *Lycaena thersamon*, *Hyponephele lupina*, *Pyronia tithonus* e *Danaus crhysippus* note di poche località.

Lo studio dello spettro corologico conferma sostanzialmente quello che era logico attendersi. Da un confronto fra la frequenza dei corotipi sensu Parenzan (1994) nelle faune dell'Appennino lucchese (Marini & Trentini, 1986) e della Sila Greca si possono notare delle differenze sostanziali (fig. 3). Mentre le specie ad ampia diffusione oloartica rappresentano una percentuale della fauna molto simile, quelle a distribuzione europea sono più abbondanti sugli appennini lucchesi e quelle a gravitazione mediterranea sono quasi il doppio nella Sila Greca. Nei Lepidotteri Ropaloceri non sembra esistere l'impoverimento faunistico teorizzato dall'effetto penisola, come spesso erroneamente si è portati a credere per analogia con le teriofaune; anzi in Sila Greca sono state rinvenute 26 specie in più che nell'Appennino lucchese, nonostante un paragonabile sforzo di campionamento. Altra differenza interessante è la maggiore presenza nel massiccio cala-

COROTIPI	APPENNINO LUCCHESE	SILA GRECA	Sila Greca Piano basale	Sila Greca Piano collinare	Sila Greca Piano montano
SPECIE COSMOPOLITE					-
SUBCOSMOPLOLITE					
COS + SCO	6.2	6.4	9.1	6.9	7.8
SPECIE AD AMPIA DIFFUSIONE OLOARTICA					
OLA + PAL + BAA +WPA	16.9	18.4	19.7	19.1	20.3
ASE	20	16.3	10.6	17.2	20.3
SIE	3.1	2.2	3	3.4	1.6
CAE + CEM + CAM	23.1	22.7	31.3	24.3	21.9
TUE + TEM + TUM	1.5	4.4	3	3.4	1.6
EUM	4.6	4.4	6.1	6.9	6.2
Totale	69.2	69.4	63.7	74.3	71.9
SPECIE A DISTRIBUZIONE EUROPEA					
EUR	9.2	6.5	4.6	5.2	6.2
EUS	10.87	6.5	6	3.4	4.6
EUW + ESW	0	2.2	1.5	1.7	3.1
ESE	0	1.1	1.5	1.7	1.6
ESC	0	0	0	0	0
Totale	20	16.4	13.6	12	15.5
SPECIE A DISTRIBUZIONE					
MEDITERRANEA MED + MES	3.1	3.3	4.6	3.4	1.6
MEW + TIR	0	0	0	0	0
MEE + TRI	0	1.1	1.5	0	1.6
NAF + NAW	0	1.1	1.5	0	0
Totale	3.1	5.5	7.6	3.4	3.2
SPECIE AFROTROPICALI ORIENTALI AIM + AFM + INM	0	1.1	3	0	0
ELEMENTI ENDEMICI ITALIANI					
AAP + APP + APS	1.5	2.2	3	3.4	1.6
TOTA	LE 100	100	100	100	100

Fig. 3. Confronto percentuale fra il carattere "mediterraneo" delle faune di Sila Greca, sia in totale che nelle sue differenti fasce vegetazionali, e Appennino Lucchese.

brese di elementi endemici italiani, che però si registra soprattutto a quote medie e basse. Mentre il dato complessivo dei due massicci montuosi è spiegabile, almeno parzialmente, con la minore ingressione nella fauna dell'Italia meridionale di specie europee, quello parziale che vede la mancanza di endemismi italiani ad alte quote sulla Sila Greca è solo parzialmente spiegabile con la continentalità climatica che vi si registra. La mancanza di endemismi montani può essere dovuta principalmente al più breve isolamento, iniziato col termine della glaciazione würmiana, subito dalle specie spinte a sud dall'avanzare dei ghiacci rispetto al più lungo isolamento subito dalle specie legate ad ambienti termofili cominciato con l'inizio dell'ultima glaciazione. Abbiamo tentato anche un altro tipo di approccio per lo studio dei corotipi unificandoli in due grosse categorie. Da una parte tutti quelli comprendenti interamente l'area del mediterraneo o rappresentanti esclusivamente una porzione di esso, considerabili nel loro insieme "mediterranei", dall'altra tutti i restanti che considereremo "non-mediterranei". Questo tipo di approccio ci ha permesso di mettere in evidenza ancora meglio il marcato carattere mediterraneo del massiccio calabrese che si esaspera alle basse quote dove è valutabile intorno al 66%,

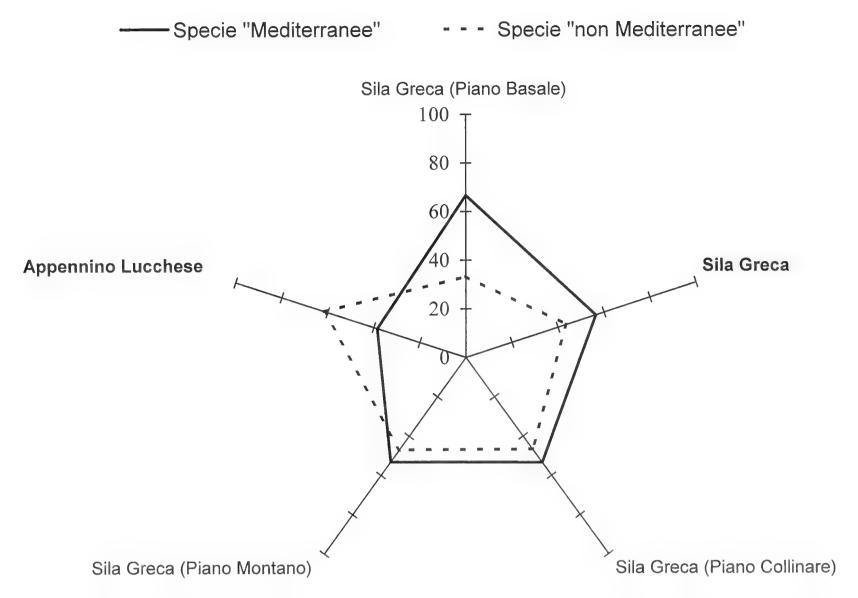


Fig. 4. Ripartizione dei corotipi sensu Parenzan (1994) relativo alle specie presenti nella Sila Greca e confronto con l'Appennino Lucchese.

riducendosi, come era presumibile, ad alta quota a circa il 50%, ma rimanendo molto più mediterraneo dell'Appennino lucchese, dove questo contingente di specie raggiunge nel complesso appena il 38% (fig. 4). L'altitudine, quindi, compensa solo parzialmente la latitudine non riuscendo ad impedire del tutto né l'ipotizzabile spostamento verso l'alto di specie mediterranee che rifuggono la calura estiva, né la conseguente presenza sull'Altopiano Silano di comunità termofile favorite dal già discusso carattere continentale del suo clima.

Ringraziamenti

Desidero ringraziare il Prof. Pietro Brandmayr per i preziosi consigli sull'impostazione del lavoro, il Prof. Emilio Balletto per la sua cortese disponibilità nel verificare alcune determinazioni, il Prof. Paolo Parenzan per l'aiuto datomi nelle ricerche bibliografiche ed il dr. Alberto Zilli per il suo paziente lavoro di referaggio.

Bibliografia

Arnone M. & Romano M., 1991 - Nuovi reperti di *Danaus chrysippus* (Linnaeus, 1758) in Sicilia (Lepidoptera, Danaidae). Il Naturalista siciliano, Palermo, S. IV, 15 (3-4): 161-166.

Balletto E. & Cassulo L. A., 1995 - Lepidoptera Hesperioidea, Papilionoidea. In: Minelli A., Ruffo S. & La Posta S. (eds.), Checklist delle specie della fauna italiana, 89. Calderini, Bologna, 11 pp.

Balletto E. & Toso G., 1979 - On a new species of *Agrodiaetus (Lycaenidae*) from Southern Italy. Nota lepidopterologica, 2 (1-2): 13-25.

- Balletto E., Toso G., Barberis G., Barberis G. & Rossaro B., 1977 Aspetti dell'ecologia dei Lepidotteri Ropaloceri nei consorzi erbacei alto Appenninici. Animalia, Catania, 4 (3): 277-343.
- Balletto E., Barberis G & Toso G., 1982a Aspetti dell'ecologia dei Lepidotteri Ropaloceri dei consorzi erbacei delle Alpi italiane. Quaderni sulla "Struttura delle Zoocenosi terrestri". C.N.R., 2:11-96.
- Balletto E. & Toso G., 1982b Lepidotteri ropaloceri dei litorali a duna dell'Italia meridionale. Quaderni C.N.R., 3: 153-158.
- Balletto E., Barberis G. & Toso G., 1982c Le comunità di Lepidotteri ropaloceri nei consorzi erbacei dell'Appennino. Quaderni C.N.R., 77-143.
- Balletto E. & Toso G., 1982d Le comunità di Lepidotteri Ropaloceri di alcuni ambienti relitti della Padania. Quaderni sulla "Struttura delle Zoocenosi terrestri". C.N.R, 4: 45-67.
- Balletto E., Lattes A. & Toso G., 1983 Le comunità di Lepidotteri ropaloceri come strumento per la classificazione e l'analisi della qualità degli alti pascoli montani. Atti XII Congresso Nazionale Italiano di Entomologia, Roma, 1980, 2: 285-293.
- Balletto E., Lattes A., Cassulo L. & Toso G., 1988 Studi sull'ecologia dei Lepidotteri Ropaloceri in alcuni ambienti delle Dolomiti. Studi Trentini di Scienze Naturali, Acta Biologica, Trento, suppl. vol. 64: 87-123.
- Balletto E., Toso G. & Lattes A., 1989 Studi sulle comunità di Lepidotteri del litorale tirrenico. Bollettino del Museo dell'Istituto di Biologia dell'Università di Genova, 53: 141-186.
- BARRETT J. P., 1910 The Butterflies of Sicily. Proceedings of the South London Entomological and Natural History Society, 9 pp.
- Bernardo L., Cesca G., Codogno M., Fascetti S. & Puntillo D., 1991 Studio fitosociologico e cartografia della vegetazione della Sila Greca (Calabria). Studia Geobotanica, 11: 77-102.
- Brandmayr P. & Scalercio S., 1996 Ricerche sui Lepidotteri Ropaloceri lungo un transetto E-W in Calabria settentrionale (Lepidoptera Rhopalocera). 57° Congresso Nazionale Unione Zoologica Italiana, Riassunti dei contributi scientifici, San Benedetto del Tronto, 22-26 Settembre 1996: 21.
- Costa A., 1863 Nuovi studi sulle entomologia della Calabria Ulteriore. Atti Regia Accademia Scienze Fisiche e Matematiche, Napoli, 1 (2): 1-80.
- Costa A., 1882 Relazione di un viaggio nelle Calabrie per ricerche zoologiche fatto nella state del 1876. Atti Regia Accademia Scienze Fisiche e Matematiche, Napoli, 9 (4), 62 pp.
- Costa O. G., 1832/1836 Fauna del Regno di Napoli. Lepidotteri. Parte prima. Lepidotteri Diurni, Crepuscolari ed alcune famiglie de' Notturni. Napoli, dai torchi del Tramater.
- Curò A., 1874/1880 Saggio di un catalogo dei Lepidotteri d'Italia. Bollettinoo della Società Entomologica Italiana, Firenze, VI/XII, 369 pp.
- Gallo E., 1978 Alcune interessanti catture di Lepidotteri in Italia (Rhopalocera). Bollettino della Società Entomologica Italiana, Genova, 110 (4-6): 84-85.
- Gallo E. & Della Bruna C., 1974 Recherches lépidoptérologiques en Italia Méridionale (Rhopalocera). Alexanor, VIII (5): 249-255.
- GALLO E. & DELLA BRUNA C., 1977 Recherches lépidoptérologiques en Italie Méridionale (Rhopalocéres). II. Nouvelles captures sur le Massif du Pollino (Apennin de Lucanie). Alexanor, 10 (2): 9 pp.
- Gonseth Y., 1994a La faune des Lépidoptères diurnes (Rhopalocera) des pâturages, des pelouses sèches et des prairies de fauche du Jura neuchâtelois. Bulletin de la Société Entomologique Suisse, 67: 17-36.
- Gonseth Y., 1994b La faune des Lépidoptères diurnes (Rhopalocera) des milieux humides du

- Canton de Neuchâtel II Tourbières, prés à litière, Mégaphorbiées. Bulletin de la Societé Neuchâteloise des Sciences Naturelles, 117: 33-57.
- HIGGINS L. G. & RILEY N. D., 1980 A Field Guide to the Butterflies of Britain and Europe. Ed. Collins Sons & Co. Ltd., London, IV ed., 384 pp.
- Longo S., 1992 Un occasionale fitofago degli agrumi: *Charaxes jasius*. L'Informatore Agrario, Verona, 48 (3): 69-72.
- Mariani M., 1940/1942 Fauna Lepidopterorum Italiae. Parte I. Catalogo ragionato dei Lepidotteri d'Italia. Giornale di Scienze Naturali ed Economiche, Palermo, 42, Mem. 3, 227 pp.
- MARINI M. & TRENTINI M., 1986 I Macrolepidotteri dell'appennino lucchese. Università degli Studi di Bologna, Istituto e Museo di Zoologia. Arti Grafiche Tamari, Bologna, XXVII tavv., 136 pp.
- MIRALLES M. & STEFANESCU C., 1994 Population structure and ecological assessment of the butterfly community in "El Cortalet" (Aiguamolls de l'Empordà Natural Park, NE Iberian Peninsula). Quaderni della Stazione di Ecologia, Museo Civico di Storia Naturale di Ferrara, 6: 103-116.
- Panizza M., 1966 Carta ed osservazioni geomorfologiche del territorio di Calopezzati (Calabria). Tipografia Coppini: 32.
- PARENZAN P., 1975 Contributi alla conoscenza della Lepidotterofauna dell'Italia meridionale. I. Rhopalocera di Puglia e Lucania. Entomologica, Bari, 11: 87-154.
- PARENZAN P., 1980 Contributi alla conoscenza della Lepidotterofauna dell'Italia meridionale. VI. Rhopalocera (addenda). Entomologica, Bari, 16: 17-29.
- PARENZAN P., 1994 Proposta di codificazione per una gestione informatica dei corotipi W-paleartici, con particolare riferimento alla fauna italiana. Entomologica, Bari, 28: 93-98.
- Pellecchia M., 1999 Note preliminari sulla Lepidotterofauna dei Monti dell'Orsomarso Parco Nazionale del Pollino (Lepidoptera Hesperioidea e Papilionoidea. Bollettino della Società Entomologica Italiana, Genova, 131 (1): 31-40.
- Pellecchia M. & Pizzetti L., 1998 Osservazioni preliminari sugli effetti del sovrapascolamento in una comunità di lepidotteri dell'Appennino meridionale (Lepidoptera Rhopalocera). 59° Congresso Nazionale Unione Zoologica Italiana, Riassunti dei contributi scientifici, San Benedetto del Tronto, 20-24 Settembre 1998: 11.
- Petagna V., 1787 Specimen Insectorum Ulterioris Calabriae. Varrentrapp & Wenner, Francofurti et Noguntiae, V + 46 pp, 1 pl.
- QUERCI O., 1920/1921 Lepidoptera in Peninsular Italy during the year 1920. The Entomologist's Record, 32 (1920): 223-227; 33 (1921): 10-15, 25-29, 70-75.
- Scalercio S., 1993/94 Ricerche faunistico-ecologiche sulla ropalocerofauna di alcuni ambienti calabresi. Tesi di Laurea, Università degli Studi della Calabria, Dipartimento di Ecologia, rel. Prof. P. Brandmayr, 129 pp.
- Scalercio S., in stampa Biodiversità e sinecologia dei Lepidotteri Ropaloceri nel paesaggio mediterraneo: la Sila Greca (Italia, Calabria) (Lepidoptera Hesperioidea, Papilionoidea). Rivista del Museo civico di Scienze Naturali "E. Caffi", Bergamo.
- Shannon C.E. & Wiener W., 1949 The matematical theory of communication. University of Illinois Press, Urbana.
- Stauder H., 1914/1915 Eine Sammelreise nach Unteritalien. Beitrag zur Kenntnis der Lepidopterenfauna der sorrentinischen Halbinsel und des Cocuzzo-Massivs in Calabrien. Zeitschrift für wissenschaftliche Insektenbiologie, X/XI, 40 pp.
- STAUDER H., 1915/1916 Lepidopteren aus dem Aspromontegebirge. Material zu einer Zusammenstellung der sudkalabrischen Schmetterlingsfauna. Zeitschrift für wissenschaftliche Insektenbiologie, 11 (11-12): 281-286; 12 (1-2): 10-14; (3-4): 59-63; (5-6): 109-112.
- STAUDER H., 1917 Eine Sammelreise nach Unteritalien. II. Zeitschrift für wissenschaftliche

- Insektenbiologie, 14: 55-58.
- STAUDER H., 1921 Neues aus Unteritalien. Deutschland Entomologische Zeitschrift. Iris, Dresden, 35: 26-31.
- STAUDER H., 1922 Neue Aberrativformen von Lepidopteren. Deutschland Entomologische Zeitschrift. Iris, Dresden, 36: 1-3.
- STAUDER H., 1923/1924 Lepidopteren aus Unteritalien. I. Societas Entomologica, Frankfurt a. M., 38 (1923), 39 (1924), 51 pp.
- STAUDER H., 1925 Lepidopteren aus Unteritalien. II. Societas Entomologica, Frankfurt a. M., 40: 3-7, 10-12.
- STAUDER H., 1928 Neue Lepidopterenformen aus Sizilien. Lepidopterologische Rundschau, 2 (10): 104-110; (11): 113-116.
- TURATI E., 1911 Lepidotteri del Museo Zoologico della R. Università di Napoli. Descrizioni di forme nuove e note critiche. Annuario Museo Zoologico della Regia Università di Napoli, (N. S.) 3 (18): 1-31.
- Verity R., 1914 Contributo allo studio della variazione nei Lepidotteri tratto principalmente da materiale di Toscana, delle Marche e di Calabria. Bollettino della Società Entomologica Italiana, Firenze, 45 (1913): 203-238.
- Zangheri S., 1963 Considerazioni sulla fauna Lepidotterologica dei massicci montani della Calabria. Archivio botanico e biogeografico italiano, Padova, XXXIX, 4 serie, vol. 8 (4), 23 pp.

Indirizzo dell'autore:

S. Scalercio, Dipartimento di Ecologia, Università degli Studi della Calabria, I – 87036 Arcavacata di Rende (CS), Italia. E-mail: sscalercio@hotmail.com

		·	

**		

SOCIETÀ ENTOMOLOGICA ITALIANA

Sede in Genova, via Brigata Liguria, 9 presso il Museo Civico di Storia Naturale

Q UOTE ASSOCIATIVE PER IL 200	13
--------------------------------------	----

Soci Ordinari dei paesi UE € 32 (L. 61.960)

Soci Ordinari dei paesi extra UE € 48 (L. 92.940)

Soci Studenti € 16 (L. 30.980)

Se si tratta della prima iscrizione bisogna aggiungere € 5

La quota deve essere versata entro il primo bimestre dell'anno; la quota versata oltre tale periodo deve essere aumentata del 50%.

VERSAMENTI esclusivamente con Conto Corrente Postale N. 15277163 intestato a: Società Entomologica Italiana, Via Brigata Liguria 9, 16121 Genova

SEGRETERIA Società Entomologica Italiana, Via Brigata Liguria 9, 16121 Genova

HOME PAGE: http://www.socentomit.it

INDICE

vol. 81



F. Cassola

Materials for a revision of the African Genus *Dromica* Dejean, 1826
(Coleoptera Cicindelidae)

3

S. Scalercio
La fauna a Lepidotteri Ropaloceri della Sila Greca (Italia meridionale)
(Lepidoptera Hesperioidea e Papilionoidea)

169

REGISTRATO PRESSO IL TRIBUNALE DI GENOVA AL N. 76 (4 luglio 1949)
Prof. Cesare Conci - Direttore Responsabile
Spedizione in Abbonamento Postale 50% - Quadrimestrale
Stampato da Ingraf, Via M.S. Genesio 7, 20158 Milano

